Church and Sunday-School Buildings

BURROUGHS

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Church and Sunday-School Buildings

P. E. BURROUGHS
Author of
"The Present-Day Sunday School"
"Winning to Christ—a Study in Evangelism"
"Old Testament Studies—a Class Book"

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INTRODUCTION

In preparing a new edition of "*Church and Sunday School Buildings*" a word of introduction may be of value. The book has already rendered an inestimable service not only to our own people, but to other denominations. It came at an opportune time to be of extraordinary value, for we were just beginning a new era of church building.

The primary purpose of this book is to make sure that in the planning for a new church building the Sunday school shall be adequately provided for. Experience shows us that most poorly devised Sunday-school buildings are the result of ignorance of what was needed. We find architects and church committees more than willing to adjust their plans so as to give the Sunday school adequate accommodation. While we are interested in the general cause of church building, we are primarily interested in seeing that these buildings properly take care of a modern Sunday school with all its requirements.

It will be noticed that the suggestions made relate to floor plans. We have not undertaken the work of the architect who must furnish the design. Each church should be designed to match its surroundings, but whatever the style of architecture back of it there must be such an arrangement of space as to meet the needs of modern church work. It is this latter thing that this book tries to take care of.

The author has had wide experience in these last few years and has carefully studied his subject. Those who make use of these plans will realize that they are not visionary, but practical. The author has had a large part in the church building plans of a multitude of churches during the past three years and he has learned the needs of pastors and practical workers.

I. J. Van Ness.

To the memory of my father

REV. HARDY MARSHALL BURROUGHS

For fifty years a minister of the Lord Jesus,

this book is inscribed.

PREFACE

Rapid and radical developments in church activities, and especially in Sunday-school methods and organization, all of which must be reflected in the church building, seem to justify an effort to offer practical guidance for those who would devise buildings which are to house the modern church and Sunday school. The graded and departmental Sunday school calls for a graded and departmental building. Modern church life calls for modern buildings which can adequately express and house the worship and activities of the churches of our day.

It has not seemed advisable or even possible to indicate the cost of the various buildings. In the nature of the case the cost will vary in different localities and according to material used, location and other considerations. In each chapter the cost of at least one building is usually indicated and this may furnish some suggestion as regards the cost of other buildings presented in the same chapter. Men with experience in building processes can make more or less accurate estimates regarding any given plan.

It is a pleasure to mention here the names of the architects whose plans are presented in this book: R. H. Hunt, Chattanooga, Tenn.; C. W. Bulger and Son, Dallas, Tex.; H. L. Cain, Richmond, Va.; J. E. Greene, Birmingham, Ala.; Geo. W. Kramer and Son, New York; F. E. Kidder (deceased); Frank L. Smith, Lexington, Ky.; J. J. Baldwin, Anderson, S. C.; Foote, Headley and Carpenter, Rochester, N. Y.; E. O. Brostrom, Kansas City, Mo.; T. W. Gardner, Nashville, Tenn.; W. J. H. Wallace, Bartlesville, Okla.; W. Russell Pope, New York.

The plans offered are almost without exception such as have been adopted by building committees for buildings which have been erected or which are in contemplation. Naturally these plans follow for the most part the outlines of Sunday-school organization which have been in vogue for some years past. Since the plans are offered rather as suggestive studies, it will not be difficult to make such readjustments as will adapt the plans to any method of Sunday-school organization which may seem to approve itself.

P. E. B.

"Ah, to build, to build
That's the noblest Art of all Arts;
Painting and sculpture are but images—
On stone or canvas, having in themselves
No separate existence. Architecture,
Existing in itself, and not in seeming
A something it is not, surpasses them
As substance shadow."

—*Longfellow* (*Michael Angelo*).

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—*E. Stanley Field, Architect.*

FIRST BAPTIST CHURCH, WICHITA FALLS, TEXAS

This beautiful classic building (174 x 174 feet) stands on an eminence and can be seen from almost any direction for miles around.

Church and Sunday-School Buildings

I

PROVIDING IMPARTIALLY FOR ALL CHURCH ACTIVITIES

Modern church activities are numerous and varied. New church buildings must take account of these varied activities. The usefulness of the new building and the satisfaction which it will inspire must depend largely upon careful and judicious balancing as regards the multiplied phases of life and work for which the building is to provide.

In broad outline, the following should be considered:

Worship; the preaching and the prayer-meeting.
Teaching; the Sunday school.
Training; the Young People's Society.
Social; entertainments, serving, banquets.
Recreational; what provision is to be made for athletics?
Institutional; what provision for community service?
Administrative; church and Sunday-school offices.

Worship. There is little danger that the preaching service will be slighted in planning new buildings; there is a possibility that the need for a secondary auditorium suitable for the prayer-meeting and other week-day services may fail of proper consideration. This subject is discussed in Chapter IX, "Concerning the Auditorium," and Chapter X, "How to Secure Enlarged Space for Special Occasions."

Teaching. The church building should provide impartially for preaching *and for teaching.* It is here that we face the gravest difficulty in designing modern church buildings. Developments in Sunday-school ideals and methods have been rapid and somewhat

radical. The graded and departmental Sunday school calls for a graded and departmental building. The arrangements for the modern Sunday school are presented in Chapter IV, "Department Rooms," and Chapter V, "Class Rooms and Special Rooms."

Training. Provision for the young people's society or societies must not be overlooked. Happily, proper provision for the Sunday school will in some measure assure also suitable quarters for the young people's organizations. The Senior Department Hall and other department rooms may be used by the young people in their meetings for training and in their social seasons.

Social. No church building, however small, should be planned without some account being taken of the social ends which it may properly be called to serve. This subject is more fully presented in Chapter XIV, "Meeting Social Demands."

Recreational. What provision will need to be made for athletics? Some phases of this question are discussed in Chapter XV, "The Gymnasium and The Swimming Pool."

Institutional. A church may introduce many institutional features without undertaking to be in the full sense an "Institutional Church." It is possible that full provision for the varied work of the modern Sunday school will insure needed rooms and arrangements for any desired institutional features. These questions should have due attention in advance. Let the main auditorium be kept sacred to the purpose of preaching the Word. If possible, provide elsewhere in the building for community needs, such as lectures, entertainments, recreation, social life, athletics, reading, banquets, educational or uplift meetings, temperance rallies, prohibition meetings, Daily Vacation Bible Schools, anything and everything which the church conscience approves as making for the betterment of the moral, social and religious life of the community. Let the building be open seven days, and particularly seven evenings, each week. It will be better for the young people to make appointments to meet each other in "the reading room of the church" than in the moving picture show. It is good for weary and burdened people to know that they can turn into the church to "rest and pray" and it is also good for gay young people to know that they will find there suitable rooms for rest and play.

Administrative. As church activities and ministries multiply, the church must increasingly provide for its own administrative needs. Besides the "pastor's study," which should generally be a place of quiet and seclusion, an office in which the pastor can meet the public, and other offices for salaried assistants, including the janitor, may seem desirable. A discussion of the provisions needed for administrative work will be found in Chapter VIII, "Church and Sunday-School Offices." If, in their effort to secure large social and Sunday-school provisions, our churches fail to provide amply for their own administrative needs, they will seriously cripple their largest usefulness.

II

SOME PRELIMINARY STEPS

The suggestions given in this chapter for the guidance of those who plan to build are the condensed findings which grow out of long experience. Some of these suggestions were formulated many years ago by the Board of Church Extension of the Methodist Episcopal Church. These were reproduced and amplified by F. E. Kidder in "Churches and Chapels." Mr. Kidder well says: "They are so sensible and concise, and carry the authority of so extended an experience, that it is believed they cannot be improved."

We urge faithful attention to these suggestions as assuring a convenient and satisfactory building, the title to which will not be questioned, and which will be in no danger from the sheriff's hammer.

I. *Organize according to the laws of the state.* The laws differ in different states and for different denominations. Secure and act upon the advice of an attorney.

II. *Secure the best possible lot.* This is vital to all the future interests of the congregation.

1. The lot should be central and easy of access. It should of course be a corner lot. Pay any reasonable price for a suitable location rather than accept as a gift any inferior site. Beware of the man who for personal or real-estate considerations offers a location as a gift.

2. It should be ample in size. Modern church buildings require much space. A church should, for its own sake and for the sake of its neighbors, be surrounded by open grounds. It is little less than a tragedy to suffer a church house to cover practically all of the lot.

3. Its title should be without flaw. Never build on a lot with a reversionary clause, or other possible hampering condition. Examine the records and see that the deed is drawn by a competent man. Let the deed be made to the church *under its corporate name,* and see that every legal detail is cared for.

THE FIRST BAPTIST CHURCH, CLARKSVILLE, TENN.

The First Baptist Church, Clarksville, Tenn., erected under the leadership of Pastor Ryland Knight, is the more beautiful and attractive because it sits well back from the street on a lot which offers ample space. We cannot too earnestly insist that modern church buildings require large space for considerations both of beauty and utility.

THE FIRST BAPTIST CHURCH, COLUMBUS, GA.

The First Baptist Church, Columbus, Ga., stands in a great open space near the center of the city. The wise foresight of the earlier fathers and their resolute determination not to sell any part of the increasingly valuable property is beyond all praise. Churches in new and growing sections should pre empt ample space for all future needs. Churches having large lot room should guard and hold their possession with jealous care.

III. *Guard against embarrassing debt.* If possible, cover the estimated cost by actual subscriptions. At least plan to secure on the day of dedication subscriptions to cover all outstanding indebtedness. Do not depend on indefinite promises, and do not count on aid from abroad except on the basis of an official promise from a denominational Board. Avoid a lingering, hampering, embarrassing debt.

IV. *Dare to go out in faith.* Few worthy church buildings could ever be erected if men insisted in advance on seeing the way through to the end. The church and the whole community will respond to the adventurous faith of men with vision. Make big plans if you would inspire a big response. Undertake something which is clearly beyond the ability of the congregation and challenge the whole community to come to your aid. It would be easy to tell here of incidents which sound like the Acts of the Apostles.

V. *Inform yourself as regards modern ideals and the best practice in church planning.* Do not depend wholly on your architect; be able to tell him your needs and to guide him in meeting them. Modern church and Sunday-school activities call for new types of buildings. It is not safe to assume that we know until we investigate the literature and the practice of the present day.

For a survey of modern Sunday-school organization which is the basis of building requirements, see the author's "The Present-Day Sunday School," or "The Church School," by W. S. Athearn.

For the guidance of your architect or your building committee, place in their hands copies of this book, or copies of "The Sunday School Building and Its Equipment," by H. F. Evans.

VI. *Give attention to the floor plan rather than to exterior appearance.* The floor plan is the crucial matter. Begin here; outline your needs and insist upon such floor plan as will meet them. The design and exterior appearance may be left largely to the architect. We court certain defeat if we select first an exterior design and then subordinate to that design all floor-plan arrangements. Begin with the floor plan and see that it provides for the various needs of your church and Sunday-school work. See Chapter I, "Providing Impartially for All Church Activities.."

VII. *Select your architect with care.* A mistake at this point is fatal. Do not seek to economize at this point. Do not undertake to erect any kind of a church building without an architect. Do not

employ an architect merely because he is a local man, and, above all, do not select him because he offers his services cheaper than others, any more than you would employ a doctor for this reason. Once you have employed an architect, trust him and treat him as your professional adviser. He will have both a personal and professional interest in your enterprise. He will be able to offer valuable counsel on many lines. For further discussion, see Chapter III, "Choosing the Architect."

VIII. *Where possible, secure the architect's supervision.* The man who makes the plans can best see that they are intelligently executed. If the architect lives at such a distance that frequent personal visits are not practical, it may seem wise to employ some experienced man to inspect the work daily, calling upon the architect to make visits at special stages.

IX. *Consider your plan in all of its details and when you have adopted it, do not suffer any changes.* Hastily formed and ill-digested plans are the cause of endless trouble and disappointment. Changes made after contracts have been closed open the way for *bills of extras* and for various complications and misunderstandings.

X. *Keep careful records and transact all business in the most accurate and business-like way.* Itemized statements should at intervals be made to the trustees, or to the church, accounting for every dollar received and expended. Let the books be carefully audited and a final complete report be made on the day of dedication. This will inspire confidence which in turn will stimulate giving.

Attention to these suggestions will protect the building committee; they will safeguard the interests of the church; and they will result in an attractive and convenient building properly located in the midst of the people for whose use it is intended.

III

CHOOSING THE ARCHITECT

This is the most vital of the preliminary steps in planning the new building. A mistake here is fatal. We have known intelligent building committees who knew what they needed in the way of floor-space provisions, and yet were quite defeated in their efforts by architects who had not studied the needs of modern church and Sunday-school life. Clearly the architect who has had successful and somewhat wide experience in planning modern church buildings has in such experience a valuable asset. We urge the selection of men who have had special training and experience in planning modern church buildings. We suggest in this connection the following considerations:

Structurally the church building is different from most other buildings. It is perhaps true that any trained architect understands the science and practice of building and can plan practically any kind of building. It is also true that we can with greater safety trust the man who has had successful experience with the problem which we face. It would be easy to tell of church buildings, some of them large and very costly, which have developed serious weaknesses. A great church tower only recently collapsed and wrecked a costly building. Similar incidents might be multiplied. The church building differs structurally from other buildings and it involves exceptional problems and perils. We, therefore, propose the selection of an architect skilled and experienced in planning churches.

The designing of modern church buildings requires more than mere architectural skill. The modern church building reflects modern church and Sunday-school life. The architect who successfully designs modern church buildings must know modern church and Sunday-school life. It would be easy to tell of efforts on the part of skilled architects who are unfamiliar with modern Sunday-school work which would be ludicrous if they were not lamentable.

The Architect Must Be "Sympathetic"

"To best meet the needs of the Episcopal Church of today, the architect must be familiar with the service and thoroughly in sympathy with it, as well as with its architectural expression."—(F. E. Kidder, in "Churches and Chapels.")

A great and manifestly just principle is set forth in the above paragraph. The architect who is called to design a great Episcopal church must for the time being assume the attitude of a devout and intelligent Episcopalian.

It is equally true that in order to meet the needs of the less formal, non-ritual, evangelistic denomination, the architect *"must be familiar with its service and thoroughly in sympathy with it, as well as with its architectural expression."* We wish that this principle might be somehow emphasized. Certainly a mere statement of it will suffice for thoughtful men.

Not Necessarily a Local Man

There are manifest advantages in having an architect near at hand and perhaps personally interested. Yet the first consideration is to secure a man skilled in the special task at hand. It is, of course, always possible to utilize the talent of the architect who has specialized in Sunday-school and church buildings even though he may chance to live hundreds of miles away. There are architects who have furnished plans for buildings in various parts of the country far from their own homes and who have given general satisfaction both by their honesty and their efficiency.

Competitions Are Generally Undesirable

Building committees have sometimes resorted to the method of asking various architects to submit plans and designs in competition with a view to select from those submitted. It will be worth while in this connection to ponder the words of Mr. Sydney R. Badgley, a thoughtful man who has won the right to be heard on this and similar questions:

"Architects should be selected just as men in other professions are selected, namely, on the basis of their professional merit and integrity of character. How many doctors, dentists, lawyers, or artists would enter a 'free' competition, and submit a prescription, set of teeth,

—*W. Russell Pope, Architect.*

THE PROPOSED UNIVERSITY BAPTIST CHURCH, BALTIMORE, MD.

This beautiful building, designed in monumental classic style, is to be erected in the neighborhood of Johns Hopkins University, and will thus be located in the midst of buildings marked by good architectural design.

brief, or portrait, to be judged by a committee of non-professionals, and returned with or without a 'thank you' if their work did not please! What class of men in these professions would enter such a race? Would their service be desirable?"

The best architects are to be had on the same terms as the best men in other professions; hence, a resolution to select an architect by free competition is likely to be a resolve to use inferior talent. Architects who serve their clients best have no time to devote to free competition.

For a paper setting forth professionally approved methods of conducting competitions, address "The American Institute of Architects," Washington, D.C., asking for Document Series A, No. 114—"Architectural Competitions"—a circular of Advice and Information.

How to Utilize the Services of the Architect

Supposing that a given community wishes to avail itself of the services of an architect who has specialized in church and Sunday-school buildings, this may be done in one of four ways.

1. *Complete plans with supervision.* The architect in question may be employed to advise the committee, to draw up all plans and specifications, to supervise all contracts and to superintend construction. This, of course, is the most satisfactory method where all conditions permit. For this service the architect usually expects a commission equal to 5 or 6 per cent of the cost of the building.

2. *Complete plans without supervision.* The architect may be employed to give expert advice, to prepare all plans and specifications, to guide in making necessary contracts, while other arrangements are made for superintending the erection of the building. In this case the commission usually asked is 3 or 3½ per cent of the cost of the building.

3. *As consulting architect.* The committee may wish as far as possible to use a local architect and yet may wish in coöperation with his talent to avail itself of the skill and experience of a widely-trained church architect. In this case the latter may be employed as consulting architect. He will then help to draw the plans and freely consult with the local authorities in the interpretation and execution of same.

4. *Special service and advice.* The architect chosen by the committee may, for his own protection and in order to secure the best results, wish to employ as consulting architect some specialist in church plans. Even skilled physicians in certain critical cases ask that other physicians be called in consultation. In this case special arrangements must of course be made as regards compensation.

STANDARD FORM OF AGREEMENT BETWEEN OWNER AND ARCHITECT

The American Institute of Architects issues the following standard "Form of Agreement" for use when a percentage of the cost of the work forms the basis of payment.

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CONDITIONS OF AGREEMENT BETWEEN OWNER AND ARCHITECT

ARTICLE 1. *The Architect's Services.*—The Architect's professional services consists of the necessary conferences, the preparation of preliminary studies, working drawings, specifications, large scale and full size detail drawings; the drafting of forms of proposals and contracts; the issuance of certificates of payment; the keeping of accounts, the general administration of the business and supervision of the work.

2. *The Architect's Fee.*—The fee payable by the Owner to the Architect for the performance of the above services is the percentage hereinbefore defined as the basic rate, computed upon the cost of the work in respect of which such services have been performed, subject, however, to any modifications growing out of these Conditions of Agreement.

3. *Reimbursements.*—The Owner is to reimburse the Architect the costs of transportation and living incurred by him and his assistants while traveling in discharge of duties connected with the work, and the costs of the services of heating, ventilating, mechanical, and electrical engineers.

4. *Separate Contracts.*—The basic rate as hereinbefore defined is to be used when all of the work is let under one contract. Should the Owner determine to have certain portions of the work executed under separate contracts, as the Architect's burden of service, expense, and responsibility is thereby increased, the rate in connection with such portions of the work shall be four per cent greater than the basic rate. Should the Owner determine to have substantially the entire work executed under separate contracts, then such higher rate shall apply to the entire work. In any event, however, the basic rate shall, without increase, apply to contracts for any portions of the work on which the Owner reimburses the Engineer's fees to the Architect, and to the cost of articles not designed by the Architect but purchased under his direction.

5. *Extra Services and Special Cases.*—If after a definite scheme has been approved, the Owner makes a decision which, for its proper execution, involves extra services and expense for changes in or additions to the drawings, specifications or other documents; or if a contract be let by cost of labor and material plus a percentage or fixed sum; or if the Architect is put to labor or expense by delays caused by the Owner or a contractor, or by the delinquency or insolvency of either, or as a result of damage by fire he shall be equitably paid for such extra service and expense.

Should the execution of any work designed or specified by the Architect, or any part of such work be abandoned or suspended, the Architect is to be paid in accordance with or in proportion to the terms of Article 6 for the service rendered on account of it up to the time of such abandonment or suspension.

6. *Payments.*—Whether the work be executed or whether its execution be suspended or abandoned in part or whole, payments to the Architect on his fee are, subject to the provisions of Article 5, to be made as follows:

Upon completion of the preliminary studies, a sum equal to 20 per cent of the basic rate computed upon a reasonable estimated cost.

Upon completion of specifications and general working drawings (exclusive of details) a sum sufficient to increase payments on the fee to 60 per cent of the rate or rates of commission arising from this agreement, computed upon a reasonable cost estimated on such completed specifications and drawings, or if bids have been received, then computed upon the lowest bona fide bid or bids.

From time to time during the execution of work and in proportion to the amount of service rendered by the Architect, payments shall be made until the aggregate of all payments made on account of the fee under this Article, but not including any covered by the provisions of Article 5, shall be a sum equal to the rate or rates of commission arising from this agreement, computed upon the final cost of the work.

Payments to the Architect, other than those on his fee, fall due from time to time as his work is done or as costs are incurred.

No deduction shall be made from the Architect's fee on account of penalty, liquidated damages, or other sums withheld from payments to contractors.

7. *The Owner's Decisions.*—The Owner shall give thorough consideration to all sketches, drawings, specifications, proposals, contracts, and other documents laid before him by the Architect and, whenever prompt action is necessary, he shall inform the Architect of his decisions in such reasonable time as not to delay the work of the Architect nor to prevent him from giving drawings or instructions to contractors in due season.

8. *Survey, Borings, and Tests.*—The Owner shall furnish the Architect with a complete and accurate survey of the building site, giving the grades and lines of streets, pavements, and adjoining properties; the rights, restrictions, easements, boundaries, and contours of the building site, and full information as to sewer, water, gas, and electrical service. The Owner is to pay for borings or test pits and for chemical, mechanical, or other tests when required.

9. *Supervision of the Work.*—The Architect will endeavor to guard the Owner against defects and deficiencies in the work of contractors, but he does not guarantee the performance of their contracts. The supervision of an architect is to be distinguished from the continuous personal superintendence to be obtained by the employment of a clerk-of-the-works.

When authorized by the Owner, a clerk-of-the-works acceptable to both Owner and Architect shall be engaged by the Architect at a salary satisfactory to the Owner and paid by the Owner, upon presentation of the Architect's monthly certificates.

10. *Preliminary Estimates.*—When requested to do so, the Architect will make or procure preliminary estimates on the cost of the work and he will endeavor to keep the actual cost of the work as low as may be consistent with the purpose of the building, and with proper workmanship and material, but no such estimate can be regarded as other than an approximation.

11. *Definition of the Cost of the Work.*—The words "the cost of the work" as used in Articles 2 and 6 hereof are ordinarily to be interpreted as meaning the total of the contract sums incurred for the execution of the work, not including Architect's and Engineer's fees, or the salary of the Clerk-of-the-Works, but in certain rare cases, e. g., when labor or material is furnished by the Owner below its market cost or when old materials are re-used, the cost of the work is to be interpreted as the cost of all materials and labor necessary to complete the work, as such cost would have been if all materials had been new and if all labor had been fully paid at market prices current when the work was ordered, plus contractor's profits and expenses.

12. *Ownership of Documents.*—Drawings and specifications as instruments of service are the property of the Architect whether the work for which they are made be executed or not.

13. *Successors and Assignment.*—The Owner and the Architect, each binds himself, his successors, executors, administrators, and assigns to the other party to this agreement, and to the successors, executors, administrators, and assigns of such other party in respect of all the covenants of this agreement.

The Architect shall have the right to join with him in the performance of this agreement, any architect or architects with whom he may in good faith enter into partnership relations. In case of the death or disability of one or more partners, the rights and duties of the Architect, if a firm, shall devolve upon the remaining partner or partners or upon such firm as may be established by him or them, and he, they or it shall be recognized as the "successor" of the Architect, and so on until the service covered by the agreement has been performed. The Owner shall have the same rights, but in his case no limitation as to the vocation of those admitted to partnership is imposed.

Except as above, neither the Owner nor the Architect shall assign, sublet or transfer his interest in this agreement without the written consent of the other.

14. *Arbitration.*—All questions in dispute under this agreement shall be submitted to arbitration at the choice of either party.

No one shall be nominated or act as an arbitrator who is in any way financially interested in this contract or in the business affairs of either party.

The general procedure shall conform to the laws of the State in which the work is to be erected. Unless otherwise provided by such laws, the parties may agree upon one arbitrator; otherwise there shall be three, one named in writing by each party and the third chosen by these two arbitrators, or if they fail to select a third within ten days, then he shall be chosen by the presiding officer of the Bar Association nearest to the location of the work. Should the party demanding arbitration fail to name an arbitrator within ten days of his demand, his right to arbitration shall lapse. Should the other party fail to choose an arbitrator within said ten days, then such presiding officer shall appoint such arbitrator. Should either party refuse or neglect to supply the arbitrators with any papers or information demanded in writing, the arbitrators are empowered by both parties to proceed *ex parte.*

The arbitrators shall act with promptness. If there be one arbitrator his decision shall be binding; if three, the decision of any two shall be binding. Such decision shall be a condition precedent to any right of legal action, and wherever permitted by law it may be filed in Court to carry it into effect.

The arbitrators shall fix their own compensation, unless otherwise provided by agreement, and shall assess the costs and charges of the arbitration upon either or both parties.

The award of the arbitrators must be in writing and, if in writing, it shall not be open to objection on account of the form of the proceedings or the award, unless otherwise provided by the laws of the State in which the work is to be erected.

FIRST BAPTIST CHURCH, AUSTIN, TEXAS.

—*C. W. Bulger & Son, Architects.*

IV

DEPARTMENT ROOMS

The departmental Sunday school calls for a departmental building. All of the reasons for departments hold equally for department rooms. The present tendency, as illustrated in these pages, is to provide assembly rooms for each department in the school and thus to conduct the school departmentally just as modern stores are conducted departmentally.

The purpose of the department rooms is to secure department worship and program. Such program, since it involves singing and other exercises which mean more or less sound, cannot be conducted without disturbing other sections of the school unless the department room is enclosed by walls which are practically sound-proof. Ordinary movable partitions can not serve this end. It will be observed that the plans shown in this book provide for department rooms separated from other rooms by permanent walls, or by a hall. Where this point is not guarded disappointment is inevitable.

These things require attention: (1) Entrance to department rooms should be from a hall or vestibule, never through any other room. (2) Department rooms should be carefully proportioned for assembly purposes. Better not have department rooms at all than to have ill-shaped rooms which do not lend themselves to assembly work. (3) Since much educational work will be done in the department rooms, wall space should be carefully provided for the superintendent's blackboard, charts, and maps, as also for the secretary's report board. (4) Except in very large department rooms, no raised platform is needed. The superintendent will prefer to stand on the floor. Where "platform" is indicated in the plans given in these pages, the superintendent's place or desk is usually intended rather than a raised platform.

In the following pages we offer pictures and drawings showing good departmental arrangements.

CRADLE ROLL ROOM, FREEMASON ST. BAPTIST CHURCH, NORFOLK, VA.

This beautiful Cradle Roll Room is shown by courtesy of Miss Lillian Williams, Elementary Superintendent. No Sunday-school house can be considered complete without suitable provision for the Cradle Roll Class. Only a few years ago children four and five years of age were considered too young to come to Sunday school. Now we eagerly claim these children for our Beginners Department, and go after their little brothers and sisters for the Cradle Roll Class.

GOOD MORNING!

SECTION OF BEGINNERS DEPARTMENT, LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N.Y

Showing furnishings especially adapted to the needs of the children. Back of the children are closets for hats and wraps with sliding doors. Note the beautiful chairs with appropriate decorations.

THE PRIMARY DEPARTMENT OF THE LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N.Y.

We show here a section of the room with specially designed tables and chairs. Note folding doors at right by means of which the Department room is subdivided into three rooms, one for each of the three grades.

BEGINNERS DEPARTMENT, SOUTHSIDE BAPTIST SUNDAY SCHOOL, BIRMINGHAM, ALA.

By courtesy of Miss A. L. Williams, Elementary Superintendent, we are permitted to see the beautiful provisions for Beginners and Primaries (next page) in the Southside Baptist Church, Birmingham, Ala. This room is 36x40 feet; it is divided into two grades by roller partitions, one class in each grade meeting in a semi-circle. There is a low white moulding around three sides of the room for coats and hats. The floor is stained a light oak color. The woodwork and the chairs are ivory white. The walls are tinted a soft shade of yellow and a trellis of pink wild roses is over each window and around the piano.

"A place of calm and tender quiet,
A place of perfect rest,
A place to work each heart inspiring,
'Tis love made manifest."

PRIMARY DEPARTMENT, SOUTHSIDE BAPTIST SUNDAY SCHOOL, BIRMINGHAM, ALA.

The Primary Department may, like the above, be subdivided by roller partitions into three rooms, one for each grade, one or more classes meeting in each room. A more desirable arrangement is to provide assembly room and separate class rooms. See page 29.

The above room is 36x40. The partitions are left up for the service in which all participate, and down during the class period.

"'Tis a place where sunbeams love to linger,
Where the air is soft and sweet,
Where happy children's voices echo
And the patter of little feet."

PRIMARY DEPARTMENT, FIRST METHODIST EPISCOPAL CHURCH, SOUTH, GADSDEN, ALA.

This beautiful department room has been much admired. Besides the assembly room, six class rooms are provided, three on either side. The class rooms might well be closed by curtains or preferably by folding doors. Observe the large blackboard in the main assembly room and also boards for the class rooms. The tables and the chairs are painted white, soft tints are used for the walls and ceiling, and the general impression of the room is altogether pleasing.

JUNIOR DEPARTMENT, EPWORTH METHODIST EPISCOPAL CHURCH, SOUTH, NORFOLK, VA.

By courtesy of Miss Lucille Simcoe, Norfolk, Va., we are permitted to see the accompanying picture of a well-equipped Junior Department. The picture shows only three sections, while the room is divided into four sections, one for each of the four grades in the Junior Course. The sections are separated by sliding doors. The number of classes or grades varies from three to five, each class separated by curtains. The enrollment in the Department is two hundred and forty, the number of officers and teachers is twenty-seven. The tables are semi-circular, placing the teacher in close proximity to each member of the class.

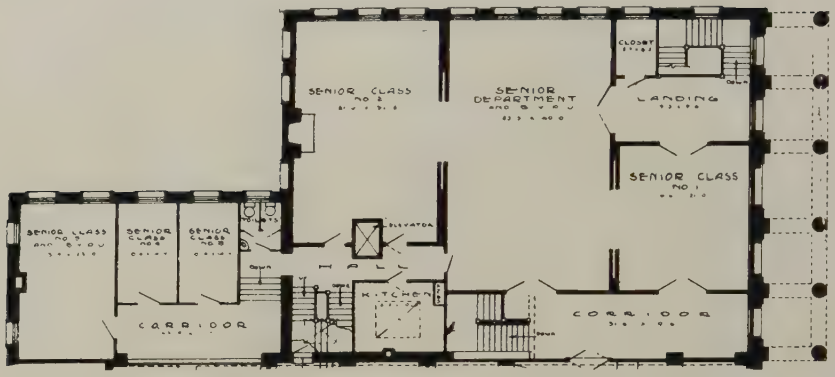
The present tendency is to provide an assembly room and separate class rooms for the Junior Department. This is more desirable. For illustrations, see plans on pages 125 to 189.

INTERMEDIATE DEPARTMENT, FIRST BAPTIST CHURCH, SPRINGFIELD, MO.

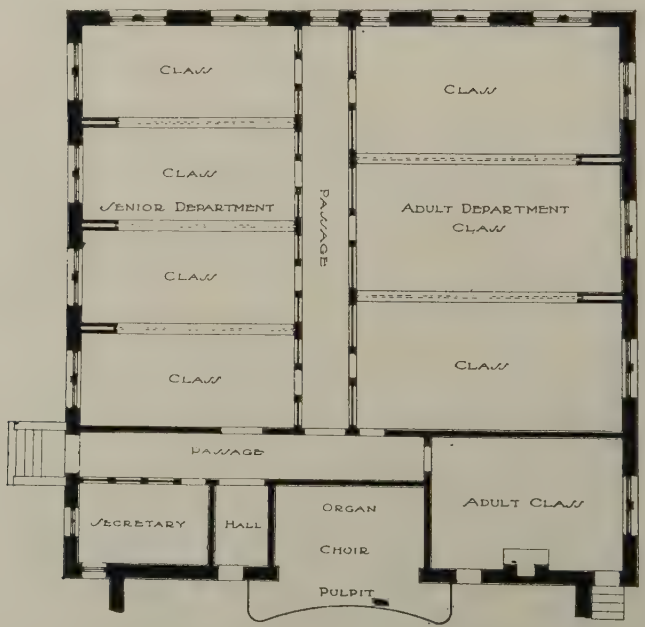
This assembly room seats 100 pupils, while separate closed-in class rooms are provided for each of the classes.

THE INTERMEDIATE DEPARTMENT, SOUTHSIDE BAPTIST CHURCH, BIRMINGHAM, ALA.

Complete and well-furnished Intermediate departments have until recently been very few in number. Rapid developments in this line make it evident that the churches are minded to make careful provision for this very important department.



SENIOR DEPARTMENT, FIRST BAPTIST CHURCH, SHREVEPORT, LA.
Showing assembly room and five class rooms.



SUGGESTIONS FOR SENIOR AND ADULT DEPARTMENTS

The above arrangement permits use of the same floor space for department, assembly and class rooms. Partitions are thrown up or back for department assembly worship. They subdivide the department rooms for class use.

This general plan for the Senior and Adult departments was adopted by the Immanuel Baptist Church, Alexandria, La., in its great Sunday-school house shown on page 196.

V

CLASS ROOMS AND SPECIAL ROOMS

For a generation the cry of the Sunday school was for class rooms. In late years the emphasis has shifted somewhat to department rooms, and lately has balanced between the demand for class rooms and for department rooms.

The ideal for class rooms would call for a square or rectangular room inclosed in plastered walls and tight-fitting doors, with sufficient space, in the lower departments, for the class to meet easily about a

INTERMEDIATE CLASS ROOM, SOUTHSIDE BAPTIST CHURCH, BIRMINGHAM, ALA.

table, and in the advanced departments, for the use of desk chairs; with unbroken wall space for blackboard, maps and pictures; having also a receptacle for class supplies. Good light and ventilation are essential.

The class rooms shown on this page and the page following are a part of the admirable equipment offered by the Southside Baptist Church, Birmingham, Ala.

All class rooms should open into a hall or corridor, or possibly into a department room, so that they may be entered without disturbing any other section of the school.

Both department and class rooms should be completely furnished so that there will be no need to move chairs or other furniture from the department room into the class rooms.

TWO OF THE EIGHT ROOMS PROVIDED FOR INTERMEDIATES IN THE SOUTHSIDE BAPTIST CHURCH, BIRMINGHAM, ALA.

The class rooms shown here are attractive and well-furnished. Plastered walls and tight-fitting doors would, however, offer material advantage over the curtains with which they are closed.

We now indicate some special rooms called for in modern Sunday-school work:

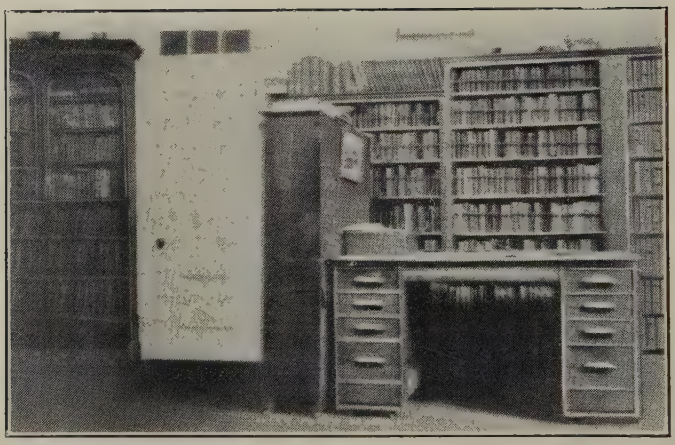
1. *A Geography Room.* There should be a special room equipped for the teaching of Biblical geography. Sand tables, maps, and all needed devices should be provided. This room might constitute a part of the equipment of the Junior Department, though Intermediate classes should have the privilege of using it on occasions.

2. *A Mission Room.* This room should be supplied with maps, globes, curios, and items of interest from mission fields, missionary books and periodicals, anything that may be useful in imparting missionary information or deepening the missionary spirit. There are schools which arrange for the various classes by turns to be taught missions in this room.

ADULT CLASS ROOM, LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N.Y.

MISSION ROOM IN FIRST BAPTIST CHURCH, SPRINGFIELD, MO.

This room is a constant reminder concerning missions to the entire church and Sunday school. It is an aid to the Sunday school, the young people's society, and the Woman's Missionary Society in teaching and illustrating missions.



A SECTION OF "THE TEACHERS' LIBRARY," PROVIDED BY THE CALVARY BAPTIST CHURCH, WASHINGTON, D.C.

3. *A Library Room.* The library should be graded as carefully as the school itself, each department having its own collection of books. It is usually more convenient to have one library room in charge of a competent librarian than to undertake to have special provisions in connection with the various departments.

LIBRARY AND SECRETARY'S ROOM, FIRST BAPTIST CHURCH, SPRINGFIELD, MO.

Public libraries cannot take the place of the library in the Sunday school. Certainly there can be no substitute for the departmental workers' libraries which forward-looking churches are now providing.

4. *A Reading Room.* This room may well adjoin the library room. It should be large, light, comfortable, easily accessible from the outside. Books, current literature, daily papers, should be provided, as also tables with stationery and all needed conveniences for writing. Down-town churches in central locations sometimes find such rooms popular and useful.

5. *Cloak Rooms.* Check rooms for hats, umbrellas, coats, and other wraps are much appreciated. Whether arrangement is made to check these things or not, surely some provision must be made for their proper care.

6. *A Teacher-training Room.* A special room for the teachers, provided with maps, blackboard, reference books, and other conveniences for the teachers' meeting and for the training classes will be much appreciated by the teachers and officers. For illustration, see page 57.

7. *Recreational Rooms.* The class rooms for Intermediates, Seniors and Adults may become the social centers for these classes during the week. Besides these other provisions of various kinds may be made on the ground floor. Here a gymnasium with simple equipment, swimming pool or shower baths with lockers, and games of various kinds may be provided. It may be desirable to have also a large room for various types of entertainments, musicals and lectures. See page 87.

8. *Ample Storage Space.* This is all too often overlooked. On each floor a small room, or at least one or more closets, should be afforded the janitor for his various supplies and for general storage.

9. *The Superintendent's Room.* In large schools it is proper to arrange and suitably furnish a room for the use of the superintendent. If this officer is regularly employed on salary he will have constant use for such room. In any case, the superintendent will need a suitable room for use before and after the school sessions in directing the varied activities of the school. See page 57.

10. *The Secretary's Room.* This room should be separate from the library. It should be provided with cabinet space sufficient to care for all the varied periodical literature used in the school. In a large graded school some such provision is essential.

11. *A Mothers' Room.* Many modern Sunday-school buildings provide a special room for a mothers' class. This class may pursue the general lessons provided for adults or special studies in which mothers have a common interest. See page 182.

12. *The Cradle Roll Room.* Children under four years of age, if they come to Sunday school, should be cared for in a special Cradle Roll Class.

Besides these rooms for the Sunday school, the modern church will usually have,

(1) A pastor's office, which should be well lighted, easily accessible from the outside and conveniently near the pulpit platform.

(2) A choir room, within easy access to the choir space in the auditorium, suitable for the assembly of the choir before services, with lockers for hats and wraps.

(3) A business office, easily accessible from the outside, conveniently arranged for the purposes which its designation indicates. See pages 50, 53.

(4) Kitchen, with stove, sink, and all conveniences.

(5) Dining room, a large airy room with tables, linens, full supply of dishes and usual dining room furnishings.

(6) Social Rooms. Any church building of considerable proportions should make ample provision for social life, while even in the smaller buildings the social needs should be taken into account.

WHERE THE IDEAL SEEMS UNATTAINABLE

The ideal calls for a special room for each department with class rooms sufficient for all classes in the department.

Supposing that this ideal is not attainable, we now indicate, in the order of their importance, the provisions which should be made for the Sunday school.

1. Rooms for the Beginners Department and the Primary Department, or at least one room to be used jointly by these departments. No church house should be erected without offering this much Sunday-school equipment. The seats required for the children, the nature of their program, the method of their instruction, call imperatively for separate accommodation.

2. *A suitable room for the Junior Department.* This would, in the judgment of most Sunday-school workers, rank second in the line of Sunday-school needs.

3. *Class rooms for Intermediate classes.* Nowhere in the school perhaps are class rooms so imperatively needed as in the Intermediate Department.

4. Next in order of importance would come provision for the Seniors. The organized classes in this department cannot do their best work without suitable class rooms, and young people of this important age should be given preference over adults in the allotment of class rooms.

5. Next in the list would come Adult class rooms. Instances have been known where this last need has been given precedence over all others.

BUILDING ACCORDING TO THE STANDARD

In erecting a building which is to be used probably for many years, it will be proper to consider how far the plans should be made in accordance with present more or less temporary conditions and

how far we should follow a normal standard. The following incidents will illustrate what is here meant:

A worker who makes a specialty of conducting great men's classes insisted that a special large room in the proposed new building should be devised for the men's class. Later the worker left the field and when conditions swung back to normal there was no proper use for the very large room which had been built for the men's class. The superintendent, showing a visitor over the building, remarked, "This room is our embarrassment." Would it not have been wise and considerate for the brother to have chosen the main auditorium for his large class rather than swing the new building away from a normal standard?

In a certain Sunday school the Beginners outnumbered the Primaries. Consequently the Beginners Department was planned to be larger in the new building than the Primary Department. A little thought would have revealed the fact that for the time being the Beginners chanced to have leaders who were more alert and vigorous than the Primary leaders. By the time the building was finished conditions had swung back to normal and the Primaries outnumbered the Beginners three to two. Would it not have been wiser to have followed the general standard?

A Sunday school had very few Intermediate pupils. When the new building was planned, correspondingly scant provision was made for the Intermediate Department. Soon after the building was completed, the Sunday-school workers were aroused by studies in a training course to the importance of the Intermediate age. They arranged to organize an Intermediate department and found, to their consternation, that their great new building offered no adequate provision for such department. Would it not have been better if they had followed some normal standard or schedule with a view to determine what might be expected *on the average* as the years pass?

A Sunday school had not caught the vision of the Beginners Department and had allowed the children of this age to go into the Primary Department, or follow the older pupils into various classes. When a new building was planned, no provision was made for a Beginners room. So long as that building stands the Sunday school will probably be handicapped in this vital part of its work, since it is now impracticable to provide suitable accommodation for these little children.

VI

MOVABLE PARTITIONS

The modern Sunday-school building must make large use of folding movable partitions. It is impracticable in the limited space which may be afforded in this book to offer detailed discussion of these much-used partitions. We present in this chapter some of the varieties which have won approval. The J. G. Wilson Corporation, New York, and the Richards-Wilcox Manufacturing Company, Aurora, Ill., send, without charge, to architects and building committees, illustrated booklets which embody worth-while suggestions.

THE WILSON FOLDING PARTITION

This improved folding partition is unexcelled for subdividing rooms, providing blackboard surface and light, harmonizing with old or new interiors and adapting space to the requirements. The partition is made up of doors, flush or paneled. These doors are hinged together in pairs and fold against the sidewalls. The entire weight is supported on castors running on tracks with the smallest possible grooves. Since each pair of doors has only two points of contact with the floor, the difficulties met in accordion partitions due to floor unevenness and other causes are overcome.

—*Courtesy of the J. G. Wilson Corporation.*

ACCORDION DOORS, SHOWING DOORS OPEN

—*Courtesy of the J. G. Wilson Corporation.*

SHOWING DOORS CLOSED

Accordion doors, hung or supported in a variety of ways, have met with much favor. They can be used to close distances either long or short. They may be "home-made" or ordered from the manufacturers.

SHOWING FIRST FLOOR AND BALCONY WITH ACCORDION-DOOR DIVISION

SHOWING HOW ONE LONG ROOM MAY BE USED FOR DEPARTMENTAL WORK AND THEN SUBDIVIDED FOR CLASS PURPOSES

We show here accordion doors. Roller partitions, either vertical or horizontal (see pages 44 and 45) might be used for this purpose.

SLIDING PARALLEL DOOR PARTITIONS

By means of these movable partitions the same floor space is made to do double service, increasing the usefulness of the building and yielding the greatest returns from the investment.

FLUSH DOOR PARTITIONS

A good and substantial method of closing large openings is the flush door partition. The partitions can be arranged so that when opened, the doors are moved back into pockets and completely concealed or the partition may be composed of one stationary door and a number of sliding doors, all when opened occupying a position alongside the stationary door. The cuts on these pages are shown by courtesy of the Richards-Wilcox Manufacturing Company.

THE WILSON HORIZONTAL ROLLING PARTITION

Since supporting posts on which these run may be removed when the partition is raised, these partitions may be used to close large openings, swing doors being used at proper places for convenient entrance. Note that these partitions show blackboard in each case.

THE WILSON VERTICAL ROLLING PARTITION

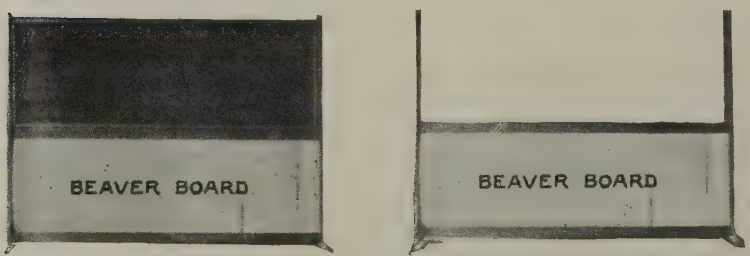
Substantial improvements have been made in these partitions, which coil sidewise, so that it is easily possible to close openings fifty feet in width without the aid of intermediate posts.

SOUND-PROOF MOVABLE PARTITIONS

The partitions which we have shown are not sound-proof and should not be used to separate rooms in which singing or other noises may disturb those in an adjoining room. Serious disappointment has resulted here in many modern buildings.

Efforts in many directions are being made to devise sound-proof movable partitions. These efforts are meeting with some success. In the Sunday-school house of the First Presbyterian Church, Nashville, Tenn. (See page 195), the problem has been solved, though at rather large cost. The device, which is illustrated herewith, is very simple; it involves the doubling of the usual prtition, using two partitions instead of one and leaving an air chamber (three inches) between. Special effort is made to render the openings between the closed doors and at the bottom of the doors as tight as possible. This device is so carefully wrought out that departments using adjoining rooms cannot disturb each other.

A SOUND-PROOF PARTITION

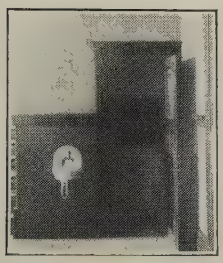


AN INEXPENSIVE HOME-MADE PARTITION

We present here a device for the separation of classes. The upper section offers a blackboard supported on hinges, so that it can be lowered when the classes are to be merged into a general assembly, as is indicated in the second section.

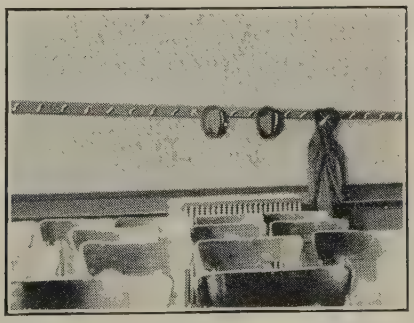
VII

CONVENIENCE HINTS



1. *Drinking Fountains*, one or more to each floor. We show here a drinking fountain in the First Baptist Church, Clarksville, Tenn., which is duplicated on the floor above. In the closet at the right is a refrigerator through which the drinking water passes to be cooled. This refrigerator also serves a good purpose in connection with banquets and other social functions.

2. *Racks for Hats and Wraps.* These should be provided in abundance throughout the building. A cloak room is desirable, but a neat board along the corridor or department wall with hangers such as is shown herewith will be found convenient. Umbrella drips will serve a needful purpose.



For certain occasions it is well to use check rooms with some one in charge for the care of hats, wraps, etc. See plan on page 158.

3. *A Door Bell.* This may serve two distinct purposes. (1) To summon the janitor or some one within. It is annoying to call at a church and not be able to gain entrance when you know that the person desired is within. (2) As a measure of protection, the bell may, on busy city streets, notify the janitor that some one has entered the building.

4. A box for mail and other packages to be left at the church.

5. *Built-in Blackboards.* In every department room and in every class room there should be a built-in blackboard with rail for chalk and eraser.

6. *Church and Sunday-school Signs.* Every church should have a suitable sign giving the name of the church, the pastor's name and information about the services. It may be needful to have a special sign at the entrance to the Sunday-school section.

7. Markers for the various departments and class rooms. The various department and class rooms should be plainly marked. "Junior Department," for example, neatly painted over the entrance to this department, and a similar sign for all departments and class and special rooms may serve a good purpose. Strangers looking through the building will appreciate this guidance. Teachers and pupils who have come recently to the school will welcome it. It gives a general air of business-like accuracy.

8. *Kitchenettes on various floors.* There will be in the proper location a well-fitted kitchen. But serving and social life may be desired on any floor. It is no great expense to provide a small kitchenette on each floor, so that serving may be done wherever desired. (See plans on pages 165, 182.) Dumb waiters are sometimes used for this purpose, but it is not always possible to provide these.

9. Windows which so diffuse the sunlight that the shining of the sun through them can cause no inconvenience or discomfort may be provided without prohibitive expense. Such glass may be had in various beautiful tints. The architect can give full information.

10. Where the whole building is not to be kept continuously heated, it is well to make provision by means of a special furnace, a stove, or a grate, for the heating of certain rooms which must be frequently used. (See church office, page 52.)

11. *Wall space back of platform.* The advantage of having plenty of blank space back of the platform for superintendents and teachers is manifest and in most cases such space is easy to provide. With little expense the top rail of the blackboard may be made in shape of a channel to receive the rolls of maps, charts, etc., so that they can be hung, stored or removed easily. Special provision for charts, honor rolls or special features of this kind can be made to order.

12. *Floor coverings.* Avoid noisy floors as far as practicable, such as wood uncovered. From the point of view of quiet, concrete is good, and there is slight objection to concrete for basement floors when properly installed. However, battleship linoleum over concrete or wooden floors is practicable and very desirable. Matting, rugs, or carpets may, of course, be used. Quiet in an auditorium or an assembly room of any kind is a condition which is necessary to the best results.

13. *Vacuum Cleaners.* A vacuum cleaner should be installed in each church where practicable. A portable type is satisfactory and inexpensive. The stationary type, for a large institution, is more practicable and more economical to operate.

14. *Bells and Buzzers.* There should be a system of bells and buzzers in every church building connected with the secretary's room. These may be installed on a separate line so that the secretary may call any department by signal separately, or in a more economical way by pressing one button to ring buzzers or bells in each department simultaneously.

15. *Closets for Literature.* Each department should be provided with a closet which can be locked for literature for that department. The shelves should be arranged to receive the special literature of the respective departments.

16. All chairs used on bare floors should be fitted with rubber tips. Cement floors should be covered with battleship linoleum or similar material which can be pasted to the floor.

17. Arrangements should be made before completion of the building for the hanging of decorations, streamers, maps, stereopticon screens, etc., in the main auditorium, the departments, and the class rooms. Who has not felt the difficulty and embarrassment in a great new building when these various decorations are needed? Before the walls are plastered and finished, it is easy to arrange all needed hooks and screws; and this can be done at that time without at all marring the finished walls.

18. Among the necessary conveniences is an abundance of vestibule and lobby space. Let entrance and exit be easy and free from the sense of crowding.

19. Ample toilet provisions should be made. This is imperative if children are to be expected to remain in the building for both the

teaching and the preaching services. There should be at least two toilets in each building where toilets are provided at all, one for men and one for women. These should be located in widely separated parts of the building. Direct entrance from public halls or main corridors or vestibules should be avoided. Where more than two toilets are provided, special provision should be made for the Primary and the Beginners Department, and in connection with the parlors or kitchen. The pastor should have a special toilet convenient to his office.

20. If use of the stereopticon or motion picture machine is contemplated, provisions should be made in advance. Needed electric connections with outlet of proper capacity and conveniently accessible, should be devised. It is not difficult to provide for the use of the stereopticon; if a motion picture arrangement is contemplated, it will be well to confer with the manufacturer as regards the size of electric wire, fire-proof booths and other items.

21. Many other minor conveniences will be provided by the thoughtful architect, such as the control of balcony stairs by means of doors with locks; folding tables for serving which when not in use may be stored; clear glass in auditorium and department room doors to prevent collisions and to enable late comers to see what is going on inside.

VIII

CHURCH AND SUNDAY-SCHOOL OFFICES

Nothing reflects the multiplying of activities on the part of modern churches more clearly than the enlarged number of administrative offices which are being provided in modern church buildings. In their effort to provide for all manner of service to the community, the churches must not neglect to make provision for their own administrative needs.

A list of possible administrative rooms is suggestive.

A Pastor's Study. This is the pastor's private sanctum with his library, desk, etc.

A Church Office, or *Offices,* for the associate pastor, the business secretary, the church stenographer and other employed helpers. Many churches are now employing a corps of paid workers for whom satisfactory office space must be provided.

The offices of the church should be separately heated, since they may be often in use when other parts of the building will not require to be heated. They should of course be amply lighted and ventilated, and they should receive morning sunlight. They should be easily accessible to the public. The church office is usually so arranged as to shield the pastor's study from casual callers and unnecessary interruptions. See plans on pages 158, 165, 181.

An Officers' Room. Just as banks provide a "directors' room," so churches are providing a "Deacons' Room," or "Stewards' Room," or "Session Room," for the various official meetings of the pastor and the church officers.

A Ladies' Room. So important and varied are the meetings and activities of the women, some churches are providing a special room appropriately furnished, properly located and designated as the Ladies' Room.

THE CHURCH OFFICE, FIRST PRESBYTERIAN CHURCH, NASHVILLE, TENN.

The church office, as distinct from the Pastor's Study, is coming to be an indispensable provision in modern church work. The office shown above is in the new Sunday-school house shown on page 195. It is easily accessible from the street, light and roomy. At the right of the fire-place, not shown in the picture, is another desk which serves the church stenographer.

THE CHURCH OFFICE, FIRST BAPTIST CHURCH, SAN DIEGO, CAL.

This office was especially designed by the Pastor, Dr. W. H. Geistweit. The door at the left leads into the Pastor's Study. With visitors of all kinds, such as come into a down-town church, the counter offers needed protection, and serves a generally good purpose. This room is close to the main entrance, and is thus easily accessible to the large numbers who have dealings with the church.

A DEACONS' ROOM

A room suitably designed and appropriately furnished is desirable for the meetings of the church officers. This room may well be used for a Sunday-school class and possibly for other purposes, but should be known in the church circles as "The Deacons' Room," or "The Stewards' Room," or "The Session Room."

THE "LADIES' ROOM" IN THE IMMANUEL BAPTIST CHURCH, NASHVILLE, TENN.

Beautifully finished and appropriately furnished, this is a most useful room.

A Superintendent's Office. The superintendent of a large Sunday school, especially if he is regularly employed, ought by all means to have a special office.

A Secretary's Office. Some churches provide an office for the secretary of each department in the Sunday school.

A Janitor's Room. In modern church and Sunday-school work the janitor has come to be a most important factor. It is economy to make ample provision for the janitor. Some churches provide him comfortable living rooms so that he may be always available for service. In large churches he will require to be a high-grade and intelligent man. An easily accessible and suitable room should be offered him, and ample provision should be made for all storage needs.

A janitor was showing a visitor through a great new church building. At last the two came to a large practical workshop. The janitor said, with a touch of pride, "This is the only room of its kind I ever heard of. I must, in the care of this building, do all kinds of mending, repairing, carpentering, painting. I save the church many bills for repairs and carpenter work. Why shouldn't I have a good workroom?"

A SUPERINTENDENT'S OFFICE

A TEACHER TRAINING ROOM

Special provisions may well be made for the administrative officers of the Sunday school. Above is the Sunday-school office in the Lake Avenue Baptist Church, Rochester, N.Y. Below is the Teachers' Library, designed also for the use of the training class. Observe specially selected books, maps, stereoscope, etc.

IX

CONCERNING THE AUDITORIUM

There should of course be ample room. Special occasions will bring exceptional attendance. A sense of roominess contributes to the success of the worship service. Assurance that seats will be available for all comers will be a potent factor in securing the attendance of the people. For methods of securing enlarged seating space for special occasions, see Chapter X, "How to Secure Enlarged Space for Special Occasions."

Proper proportions in floor space should be observed. A hint as to proper proportions may be gained by the carrying power of the human voice. The voice carries proportionately about as follows: Directly in front of the speaker 90 feet, directly at one side 50 feet, directly behind 30 feet (Kramer.)

The proportions of the early meeting houses which were about as 44x60 were very good for hearing purposes. There will probably never be any great improvement of the rectangular auditorium of the straight-line classic type which was so much favored during the first half of the last century, and which is still to be found in many sections.

In an auditorium of such proportions as is set forth above, the pulpit platform may well be placed in the middle of one side wall, or the auditorium may be square or nearly so with the pulpit at the middle of one wall.

According to Kidder, the shape of the audience room best adapted to evangelical churches, is a rectangle whose depth measured from the pulpit is from five-eighths to three-fourths of the width, say forty-five feet by sixty feet with the pulpit in the middle of one of the longer walls. He further suggests that a square room with the corners cut off, or an octagonal room is satisfactory, if the room is of good size.

The auditorium should be marked by reverent dignity such as will inspire worship. The irregular and sometimes fantastic proportions of some modern auditoriums must grieve and even offend worshippers. And what shall we say of flashy decorations, of pictures or

other marked tracings on the walls or ceilings, of memorial pictures of the dead, and of ill-conceived Bible scenes wrought into the windows? We instinctively desire that the sanctuary in which we assemble for the worship of God shall be reverent and dignified.

The pulpit-in-the-corner idea is to be avoided. In very small buildings this may not be especially objectionable, though it is not the most desirable in any building. The idea came with the effort to provide a secondary auditorium for the Sunday school which could open into the main auditorium. In order that the pulpit might command both rooms, it was moved into the corner. The arrangement has never proven satisfactory either from the practical or architectural standpoint.

Vestibules sufficient in number and ample in size should be provided. Such vestibules are worth far more than their cost. They lend an air of welcome; they provide waiting room for people who arrive during prayer or such other parts of the service as may delay the incoming congregation; they encourage sociability; they enable the audience to pass out quickly when the service is over. When the size of the building will justify, a vestibule extending entirely across the front of the audience room is desirable. Such arrangement is really economical and especially desirable when a balcony above can extend to the outside wall.

In a building seating 500 or more, it is desirable to have at least three vestibules. The main corner vestibule should be free from obstruction, while the other two diagonally opposite each other may have stairways. In this way by placing the stairways from basement and gallery in the subordinate vestibules, the crowd is automatically distributed and congestion is avoided.

Stairways. The thoughtful architect will give careful attention to the exits and entrances, and especially to the stairways, with a view to facilitate the movement of the people and to avoid all possible congestion.

According to Kidder, stairs leading to the audience room and the stairs to the gallery should not be less than four feet wide for the entrance of fifty people and six inches should be added to the width for every one hundred people.

Doors. In many states the law requires that outside doors shall swing out. The manifest reason for this is that in case of fire or any

sudden panic, the crowd may not be trapped by the doors. Mr. C. C. Bulger suggests that when the out-swinging doors protrude in an unsightly or impracticable way beyond the brick jamb, it is possible to build in false work in wood or other material, so that the door may have a jamb its full width on which to swing. This can be made to appear as a part of the construction, giving the effect of a very thick wall, which is desirable.

THE NEW FOYER AND RECEPTION HALL IN THE REMODELED THIRD BAPTIST CHURCH, ST. LOUIS, MO.

(Looking from front entrance toward Audience Room.)

This spacious foyer serves (1) as a "Chamber of Silence," shielding the audience from the noise of a specially busy street; (2) as a reception hall permitting and encouraging the exchange of greetings. Pastor W. H. Geistweit declares that "the church never made a better investment."

The pulpit platform. If the floor is bowled, the platform may well be the same height as the floor at the rear end of the building. In an auditorium 40x50 feet, 12 inches is a suitable height; in an auditorium 60 x 60 feet, or larger, the platform may be 18 to 24 inches high. A high platform renders the front seats undesirable, and a tier of vacant seats around the pulpit is difficult for the preacher and the choir.

The platform should be at least six and a half feet deep and twelve feet across; a depth of seven or eight feet is desirable. In small churches, sittings should be provided for at least six people, and in larger buildings correspondingly larger platform space should be provided.

In Methodist churches, a special space in front of the platform is inclosed by a communion rail. This space is raised and a step extends about ten inches in front beyond the rail on which communicants kneel. For illustration, see plans on pages 162 and 169.

In all larger buildings an entrance to the platform should be provided from the rear so that the pastor will not have to come into the auditorium and climb the steps before the audience. Pastor G. W. Truett insisted upon this when the First Baptist Church, Dallas, Tex., was being remodeled. (See page 72.) For acceptable arrangements in this regard, see plans on pages 149, 165, 169, 185, 191.

Week-day and smaller worship services. The prayer meeting and many other worship services cannot properly be held in the large auditorium. Special provision should be made for such services in a secondary auditorium. This secondary auditorium should be easily accessible, reverent, and impressive, a dignified and complete assembly room.

It is not sufficient to have floor space to accommodate a given number of people. There should be the atmosphere of an auditorium. This may be accomplished by a high ceiling, freedom from posts, uniform and well arranged features, such as give a room a satisfactory architectural effect. Since its uses are the same as those of the main auditorium, this room may well have all of the architectural effects, except in size, which mark the main auditorium. For best results this room should be complete in itself (see page 158), and unhampered by evidences of its use for other purposes.

Good acoustic properties are of prime importance. If the speaker experiences difficulty in speaking, or the singer in singing, or if the hearer finds difficulty in hearing, a chief end of the building is defeated. Happily modern architecture has measurably mastered the once baffling question of acoustics in public buildings. And yet even in our day mysterious difficulties and grievous disappointments are not uncommon. One eminent divine thus strongly puts it: "Acous-

tics is so important that I would place it before every other merit; before light, or ventilation, or comfortable seats, or beauty, or any virtue. Give us churches in which the human voice can be heard with pleasure and profit."

There are types of structures well known to the architects which furnish reasonable security from such disappointment, as there are well-tested means for remedying acoustical defects. The H. W. Johns-Manville Co., of New York, along with other firms, make a specialty of guaranteeing acoustics in new construction and of remedying defects in buildings already erected.

Such firms guarantee the acoustics of a building on condition that certain prescribed materials are used and certain prescribed requirements are met. These firms offer the services of special engineers without charge under certain conditions. These engineers will examine the plans of a building and from these they can determine accurately what will be the acoustical properties of a proposed auditorium. If they find the building correct acoustically they will so report; otherwise, they will suggest a remedy and indicate the cost of the materials and treatment required to correct any acoustical defects.

The architect who is skillful in these lines can, by correct proportions, by proper use of materials, and in other ways, insure practically perfect acoustics without such special treatment.

Acousticons should be provided. Every auditorium, whether large or small, should be provided with an apparatus for the convenience of partially deaf people. This consists of an electric apparatus with receiver at the pulpit stand and ear pieces at various points in the auditorium so that the deaf need not be congregated at any one point. All that is required to use these instruments is for the persons to apply the ear piece to their ears and the sermon can be heard satisfactorily.

The lighting of the building is an important feature. The ideal is a soft sufficient light. Undue brightness or funereal gloom are to be avoided. Electric light by the indirect method is most desirable. In the matter of first cost and of current consumed, this method is somewhat expensive. The increased expense is more than justified by the restfulness and satisfaction produced by this method of lighting.

Second to the direct method is the semi-indirect method in which the lamps are all concealed behind glass of a diffusing character.

Ventilation is a vital factor in the worship service. Pivot windows (windows supported at the sides) are desirable from the standpoint of ventilation.

Besides the usual window ventilation, there should be an opening in the ceiling of the auditorium with a convenient device for opening and closing, and connected with the outside to permit the escape of hot air which collects in the upper part of the building. The attic space should also be ventilated through the apex of the room, and also at the eaves to promote a circulation of air. All space under floors should also be ventilated.

The systems of artificial ventilation and of artificial cooling generally call for the closing of windows and doors. For this reason they have met with only partial success. In the southern sections of our country there is probably no substitute for the direct window ventilation supplemented by direct fans. Fans of various types, "buzzers," ceiling fans or fans on pedestals can be installed in churches without materially marring the architectural effect. They contribute much to the comfort and popularity of an auditorium.

X

HOW TO SECURE ENLARGED SPACE FOR SPECIAL OCCASIONS

THE PROBLEM STATED

If the attendance could be uniform throughout the months and years, the question of the size of the auditorium would be simple indeed. But instead there will be the usual attendance and then special occasions will call together large congregations which may more than double the ordinary numbers.

To provide an auditorium large enough for such special occasions means that for all other seasons worship must be conducted in a room quite too large and involving heavy expense for care and heating. It is manifestly desirable to have easy space for the average attendance with possibility of enlargement for unusual attendance.

A FAVORITE METHOD NOW DISCREDITED

It has been customary to meet this problem by devising two auditoriums side by side with a movable partition between, one called "The Main Auditorium" and the other "The Sunday-school Room."

Two difficulties have arisen in this connection. The room thus provided has nearly always proven inadequate to accommodate the Sunday school, whose attendance has been usually as large as that of the preaching service, and sometimes much larger. A more serious difficulty lies in the fact that the Sunday school, as now organized and conducted, does not need the type of accommodation which is provided in the usual annex to the main auditorium with a view to increase its capacity on special occasions. The departmental and graded Sunday school calls for department rooms and class rooms.

A moment's reflection will show that there are in the plan which permits the combination of two auditoriums manifest disadvantages. The plan results in a "dead" wall for both auditoriums. Architects feel this disadvantage especially, and even laymen must recognize it the moment it is pointed out.

HALLWAY IN LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N.Y.

We have here a beautiful hall between the main auditorium on the left and the large Sunday-school and social rooms on the right. A unique feature worthy of note is the arrangement by which windows at rear of auditorium (left) can be opened so that the hall and the rooms opposite may be used to supplement the seating capacity of the auditorium. In emergencies two hundred people have been thus accommodated in addition to the normal seating of the auditorium.

PROPOSED SOLUTION OF THE PROBLEM

The plans offered in these pages may well be studied for suggestions in this connection. In small buildings the problem is simple; class rooms open into the auditorium and thus supplement its seating capacity. Various illustrations are presented in Chapters XIX to XXI. In larger buildings the following methods of securing a reserve of seating space are recommended:

1. Large Senior or Adult class rooms which open into the auditorium. See especially plans on pages 126, 133, 142, 145.

2. Department rooms which may supplement the seating of the main audience room. For reasons which must be evident, department rooms for Beginners, Primaries, and Juniors should not be used for this purpose. The furniture and general equipment of these rooms is such that they cannot well be used in connection with a larger auditorium for general seating purposes. For illustrations of good arrangements of this kind, see plans on pages 149, 155, 169.

3. The Balcony. Mr. Kidder suggests that any audience room seating three hundred persons will usually have sufficient height of ceiling to admit of a balcony across the back of the room, and that the room which provides for the seating of four hundred will usually admit of a balcony around three sides. A spacious balcony may increase the seating capacity by one-third and in some cases by one-half. Naturally the balcony will be unused on ordinary occasions as the congregation will fill in below. Neither the people nor the preacher feel any special depression because the balcony is not occupied, such as they feel if large space on the main floor is not occupied.

4. Folding chairs. It is always possible to draw from nearby department and class rooms a generous supply of folding chairs. Thus the normal capacity of the auditorium may usually be increased about 10 per cent.

XI

BUILDING FOR EVANGELISM

In the last two chapters we have discussed general arrangements for the preaching and worship services. These include, of course, evangelistic services, and yet the winning of the lost constitutes so large and so important a place in the proper program of the church, it seems needful to indicate some special provisions which ought to be made looking toward successful evangelism. Some of these are discussed elsewhere in this book, but we suggest them here for the sake of emphasis and completeness.

1. Ventilation and heating have a special bearing in the matter of evangelism. Impure and oppressive air may effectually defeat earnest efforts to win the lost, as also may discomfort as regards heat or cold. Successful evangelists always exercise care for ventilation and heat. Dwight L. Moody and William A. Sunday are notable examples; neither of these men would ever consent to leave wholly to others the arrangements for ventilation. Who that ever heard these mighty evangelists can forget how occasionally they have paused in the midst of an impassioned address to ask the ushers to change the air? Perhaps few who have worshipped in the great "Sunday" tabernacles know with what care and skill the evangelist has designed the great temporary structure to the end that it may be evenly heated and readily ventilated.

These problems are emphasized when we come to evangelism, because attendance is frequently large during special evangelistic seasons. The architect must coöperate with the evangelist at this point. The building which gets a bad reputation as regards ventilation and heating will offer a serious barrier to the evangelist.

2. *Acoustics constitute a vital feature in evangelism.* An auditorium may be fairly good for speaking and utterly bad for singing. It may be good for singing and very poor for speaking. We know of some auditoriums which are bad both for speaking and singing.

Such auditoriums offer a heavy handicap to evangelism. It is now demonstrated that bad acoustics can be scientifically treated and remedied. See Chapter IX.

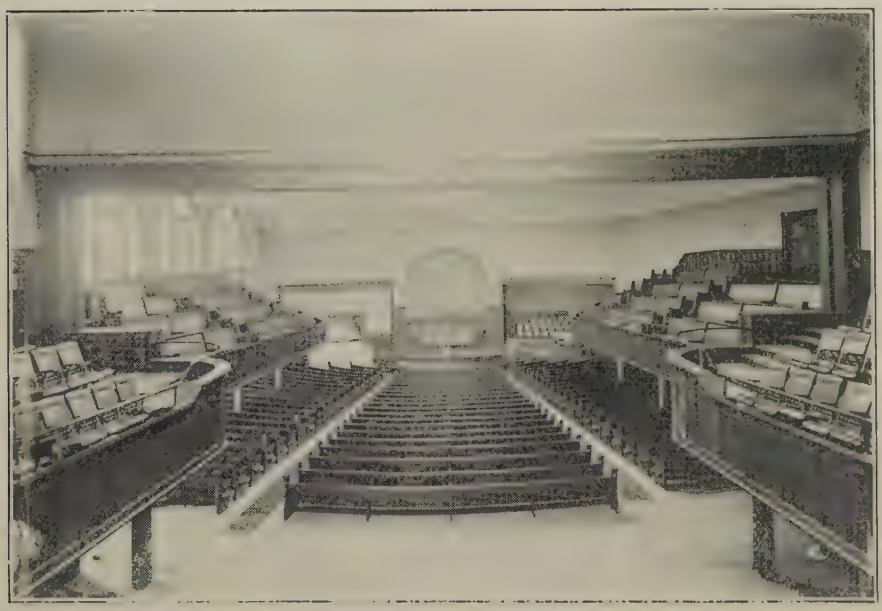
3. *A central location with easy and ample entrances and exits constitutes a further important contribution to evangelism.* Study in this connection modern theater buildings and houses for the movies. No expense is spared to secure central locations on crowded thoroughfares. The entrances are direct from the sidewalk without so much as a step. Entrances and exits are so numerous and skillfully arranged that crowds experience little delay or discomfort in getting in and out. Here again the architect may coöperate with the evangelist in securing a hearing for the gospel.

4. *A proper seating plan may lend assistance to evangelism.* All aisles should be straight and should lead direct to the rostrum. "Blind" aisles, those which extend for a given distance and are closed by a pew in front, should be avoided, as is elsewhere pointed out. We have seen penitents under conviction start in one of these aisles toward the minister only to find himself closed in and compelled to turn to the right or left and push his way past a crowded pew. Unduly long pews should be avoided for obvious reasons.

Easy space should be left between seats so that personal workers wishing to approach the lost may do so without crowding, and so that penitents may be able conveniently to pass out in accepting the evangelist's invitation. Pews should, with this end in view, be spaced 36 inches from back to back, while opera chairs should be spaced 33 inches from back to back. For fuller discussion of seating problems, see Chapter XXVI.

5. *Ample seating capacity is needful for successful evangelism.* It is a calamity to be compelled to move from the church building to some hall or opera house or tabernacle in order to accommodate a large attendance. There are manifest advantages in holding evangelistic services in the church house. Thus blessed memories and sacred associations will enrich the sanctuary in which worship is ordinarily offered. In the last chapter we discussed methods by which enlarged auditorium space may be secured for special occasions. Illustrative plans are offered throughout this book.

6. *The platform arrangements may contribute to evangelism.* These are discussed at length in Chapter IX. It is desirable, what-



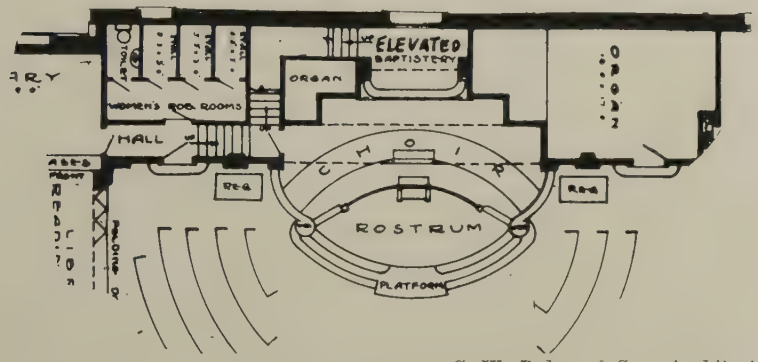
INTERIOR, FIRST BAPTIST CHURCH, SAN DIEGO, CAL.

Ample seating capacity is needful for successful evangelism. Every seat in this great auditorium is within easy sight of the speaker. On the right of the platform, only partly shown, is room for a large chorus choir. Stairs descending near the pulpit are shown in another view (page 74).

THE GRACE STREET BAPTIST CHURCH, RICHMOND, VA.

(1) Seats are provided for a chorus choir of sixty persons. (2) The arrangement of the console and stand for a quartette over the baptistry, while the remaining choir space is less elevated, permits a low choir loft which in evangelistic churches is much desired. The question of an open aisle directly in front of the speaker is discussed on page 221.

ever conditions may ordinarily obtain as regards the church music, that there shall at least be space for a full chorus choir during special evangelistic services. This space should be so related to the speaker's platform that the preacher can have easy access to the choir director. Elevated choir platforms which make complete separation between the choir and the preacher tend rather to formalism and are not favorable to evangelism.



—C. W. Bulger & Son, Architects.

PULPIT ARRANGEMENT IN THE REMODELED FIRST BAPTIST CHURCH, SHREVEPORT, LA.

Showing a lower secondary platform in front of the rostrum. Note also elevated baptistry back of the choir. See also pages 83 and 84.

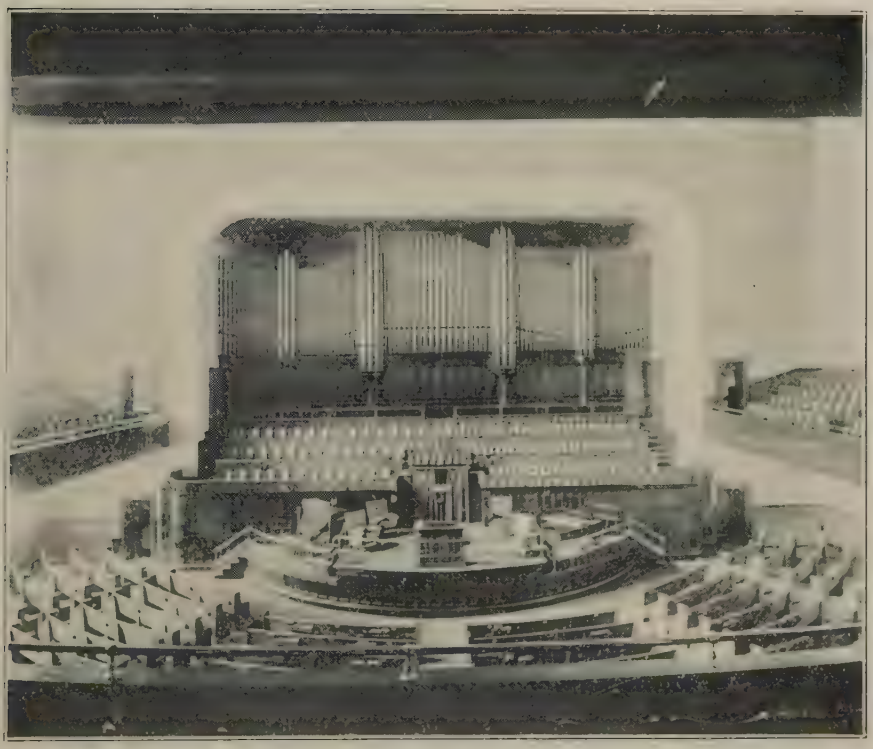
A lower secondary platform to which the evangelist may descend after he has delivered his message, for exhortation and reception of members, is considered by many to be indispensable. Such platform may serve various good ends.

7. *Balcony stairs so arranged as to lead easily and directly to the platform will aid evangelism.* Where stairs lead down to an outside vestible the penitent accepting an invitation from the preacher must go outside and turn again into the auditorium. In order to avoid this, it has been proposed that the stairs may lead down and land inside of the auditorium. See Plan XXIX.

—*C. W. Bulger & Son, Architects.*

FIRST BAPTIST CHURCH, DALLAS, TEXAS

Showing (1) the secondary platform which we suggest; (2) space for a large chorus choir; (3) choir platform as low as baptistry will permit; (4) entrance to pulpit platform direct from the rear (see suggestion, page 61).

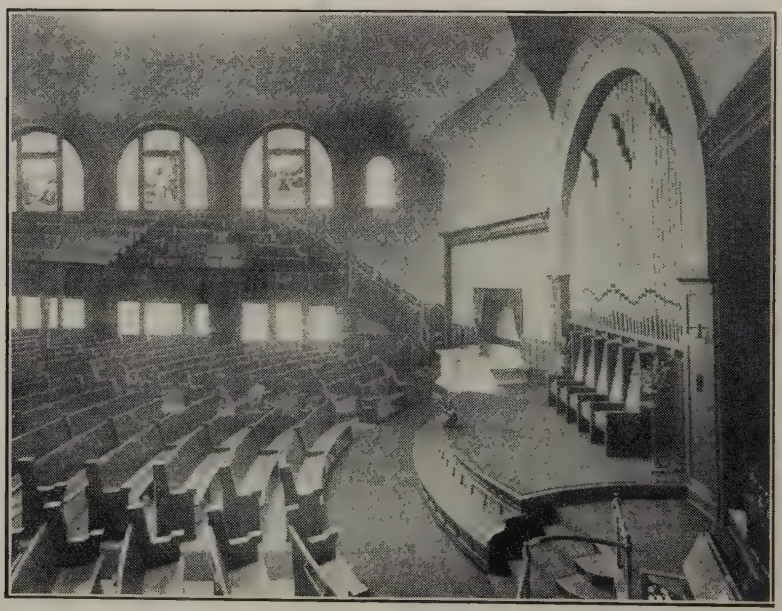


THE TABERNACLE BAPTIST CHURCH, ATLANTA, GA.

Only two things are needed to complete the ideal for evangelistic buildings which we present: (1) A medium or secondary platform in front of the pulpit to which the minister may come down when he wishes to make his appeal to the unsaved or to receive members; (2) the stairs descending from the galleries to the main floor on either side of the pulpit.

If the auditorium is large and side balconies are installed, stairs may lead down at the front of the church to points near the platform. See First Baptist Church, San Diego, Cal. The stairs have been sometimes brought down to land on the platform. This arrangement has not proven satisfactory and besides is difficult from an architectural viewpoint.

8. *An enquiry room or rooms may seem desirable.* After the evangelistic services it has long been customary to ask personal workers and people who are interested to remain for an "after-meeting." This may be held in the main auditorium. Manifestly there are advantages in holding such a meeting in a smaller room. Such room should of course be conveniently located and sufficiently large to accommodate without crowding those who wish to remain.



THE FIRST BAPTIST CHURCH, SAN DIEGO, CAL.

The stairway leading down from the balcony is a feature specially commended as an evangelistic necessity. This stairway is of course duplicated on the opposite side of the building.

XII

THE ORGAN

Important among the things which make for a successful and satisfactory building is an organ of good tone and sufficient volume. If for any reason purchase of the organ must be deferred, the new building is used at a decided disadvantage. Building committees, architects and others interested are usually quick to appreciate this fact, and hence in most cases effort is made, even at considerable sacrifice, to install the organ on completion of the building.

The location of the organ must, of course, depend upon the design which the architect is developing. A central location, immediately back of the pulpit, is generally desirable. The organ should, of course, be close to the choir. Half of it may be placed on one side of the choir and half on the other.

Careful attention should be given to the space required by the organ. Serious difficulty and not a little expense may be encountered by failure to provide room for the tuner or repairer. While rectangular space is to be preferred as being more economical, the organ builder can construct the organ for almost any kind of space, provided there is sufficient room.

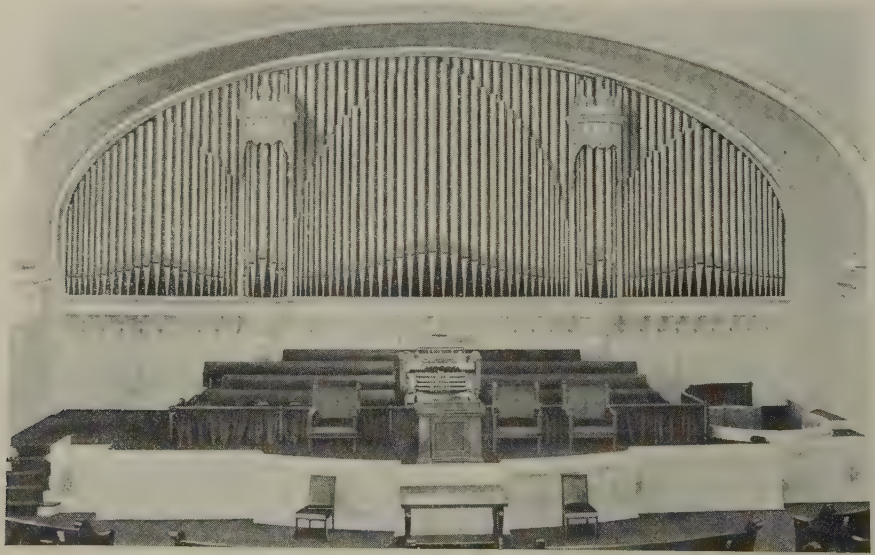
The Austin Organ Company, Hartford, Conn., has, at the request of the author, prepared a table of dimensions for organs ranging in price from $2,000 to $10,000. This schedule is only suggestive. Organs vary widely, and often they can be planned to advantage in unusual spaces where additional height, for instance, makes up for smaller floor space. Again, additional width may take the place of depth. Spaces where corners are taken off are wasteful because organ chests are necessarily rectangular in shape. If this table is used as a suggestive rather than an absolute guide, it will furnish a general basis which will be of value.

TABLE OF DIMENSIONS FOR ORGANS

Cost	*Width*	*Depth*	*Height*
$ 2,000	9′ 6″	5′	10′ 6″ to 14′
3,000	10′ 6″ to 12′	6′ to 7′	12′ to 14′
4,000	10′ 6″ to 12′	7′ to 8′	14′ to 16′
5,000	12′ to 14′	9′ to 10′	16′ to 18′
6,000	14′ to 16′	9′ to 10′	18′ to 20′
7,000	15′ to 18′	9′ to 12′	18′ to 20′
8,000	18′ to 22′	9′ to 12′	18′ to 20′
9,000	23′	9′ to 12′	18′ to 25′
10,000	23′ to 25′	12′ to 14′	18′ to 25′
*Average Echo Organ.			
2,000	12′	5′	10′ 6″ to 14′

Speaking from the standpoint of the architect, Mr. C. C. Bulger offers the following suggestions:

The shape of the space left for the pipe organ is as important as the number of square feet provided. Depth is more important than width. Eight feet for depth is practically the minimum for stock organs; eleven or twelve feet will take the majority of stock organs.



ORGAN IN THE INDEPENDENCE BOULEVARD CHRISTIAN CHURCH, KANSAS CITY, MO.

was manufactured by the Austin Organ Co., Hartford, Conn. The baptistry arrangement is good and the provision for a large chorus choir close to the pulpit platform is admirable.

ORGAN IN THE PRIVATE MUSEUM OF MR. SAMUEL PARRISH, SOUTHAMPTON, LONG ISLAND.

Built by the Kimball Organ Co., Chicago.

All special and expensive organs should be taken care of by special specifications. The height should not be less than twenty feet for the average organ, more is preferable, and less than sixteen feet (except under special conditions) is too small. Twelve feet in width is a good minimum.

How to Select an Organ

Since organs must usually be made to order and thus cannot be examined and tested in advance, there is necessarily a possibility of disappointment.

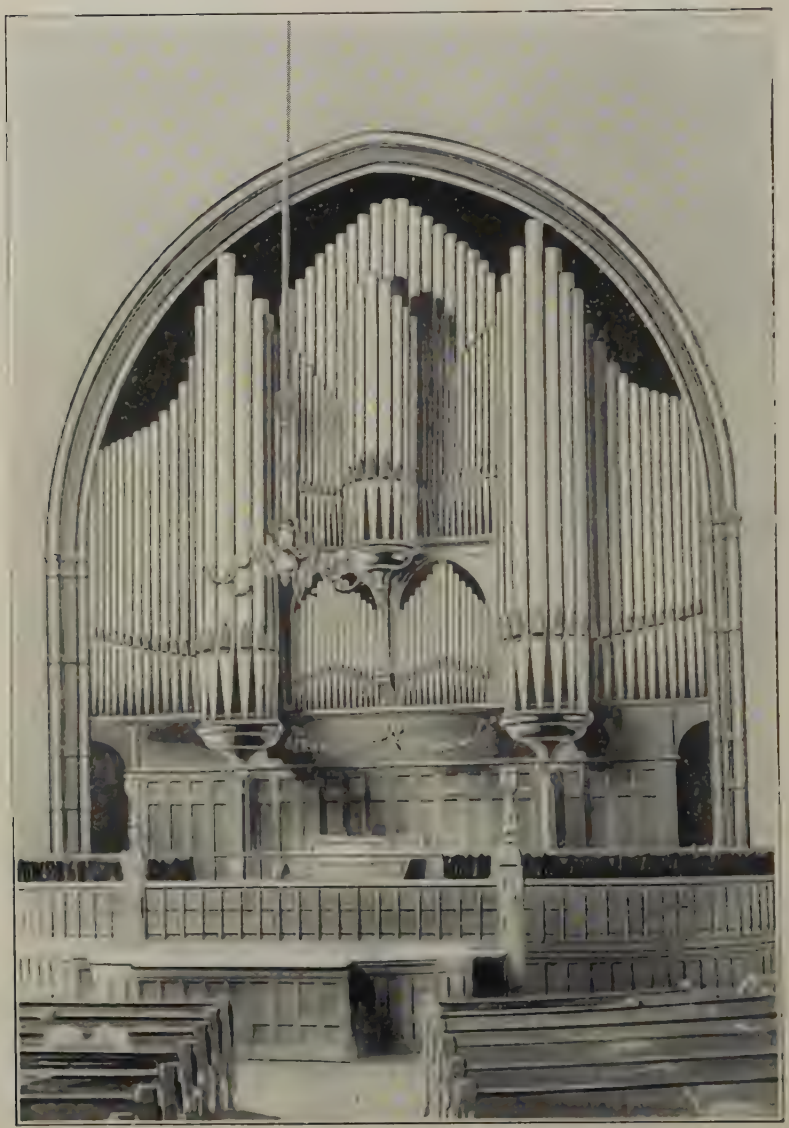
In selecting the organ the service of a practical organist will be valuable. Such an organist can make up a complete schedule of the stops, the construction, the space, and other important items for submission to the organ builders. His counsel may contribute materially toward securing an organ which will give permanent satisfaction.

If it does not seem possible to utilize the services of such a practical organist, the next best step will be to frame a complete statement of needs, of space reserved for the organ, and enclose with a plan of the building and an estimate of the amount to be expended, to some reputable organ builder. The builder will make a study of all of this material and will submit a proposition. He may be able to make helpful suggestions.

If we are not technically familiar with organs so that we can rely on our own judgment, we may well make careful selection of a reputable builder and rely on his guidance. For uninitiated laymen to rely on competition or a comparison of builders' specifications is to court failure. The numbers of stops, pipes, manuals and feet of casing can constitute no sure guide. Employ a reliable builder and let him advise on all of the essential points. It will be a matter of present concern and of future profit to him to find a proper and practical solution of your problems.

ORGAN IN THE FIRST PRESBYTERIAN CHURCH, YOUNGSTOWN, OHIO

Built by the Austin Organ Co., Hartford, Conn.



ORGAN IN FIRST BAPTIST CHURCH, PATERSON, N. J.

Built by the Kimball Organ Co., Chicago.

XIII

CONCERNING THE BAPTISTRY

When churches require a baptistry, the architect should make the baptistry an integral part of the design. The fact that certain architects do this possibly explains why they win a reputation for building beautiful and satisfactory baptistries.

The location of the baptistry is a question of importance. Custom varies widely here and thoughtful architects are giving the whole question careful study. An examination of the plans given in these pages will yield many suggestions. We venture the following suggestions as regards the location of the baptistry.

(1) The baptistry has been frequently placed under the platform occupied by the choir, or the preacher, or by both choir and preacher, the floor over the baptistry being arranged in the form of movable doors. This, of course, is a compromise made in the interest of economy, and is never satisfactory.

(2) When the choir is located on one side of the pulpit platform, the baptistry may be placed on the other side.

(3) The choir may be located in a loft back of the pulpit, while the baptistry is placed underneath this loft. The difficulty here lies in the fact that the choir is thus elevated higher than is usually desired by evangelistic churches. For reasonably good arrangements in this regard, see pages 70 and 72.

(4) The baptistry may be placed back of and above the choir. See pages 83 and 84. This arrangement is meeting with favor, especially among architects. Among modern churches which have adopted this idea, we may mention the First Baptist Church, Clarksville, Tenn., the Eighth Street Baptist Tabernacle, Kansas City, Mo., and the Third Baptist Church, St. Louis, Mo.

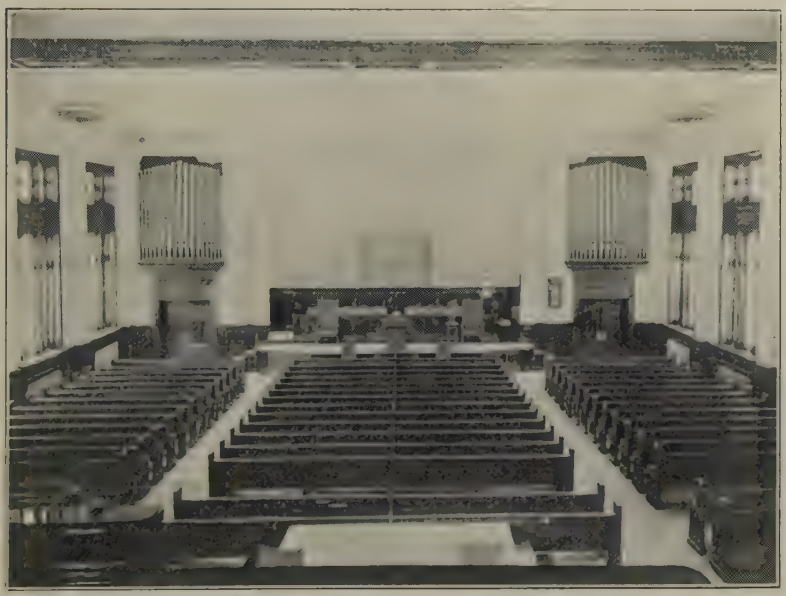
(5) The baptistry may be given its own distinct place in the building, as is illustrated in the baptistry of the Immanuel Church, Nashville, Tenn. This arrangement is, of course, in every way desirable.

THE BAPTISTRY, FIRST BAPTIST CHURCH, MONTGOMERY, ALA.

Done in marble, with marble steps approaching the platform. (See next page.) Renders the ordinance more impressive by placing it in full view of the entire congregation.

THE FIRST BAPTIST CHURCH, MONTGOMERY, ALA.

Has a beautiful marble baptistry back of the pulpit. Leading up to the platform, directly in front, is a series of wide steps.



THE FIRST BAPTIST CHURCH, CLARKSVILLE, TENN.

The baptistry is placed back of the choir, under the arch. See also next page.

PULPIT ARRANGEMENT IN THE THIRD BAPTIST CHURCH, ST. LOUIS, MO.

Note the "grill" organ instead of the "pipe" organ. The grill organ is meeting favor, especially where it is desirable to locate the baptistry under the organ. In the above view we have first the pulpit platform, then the chorus choir, and elevated in the rear is the baptistry.

C. W. Bulger & Son find this arrangement for the baptistry on the whole the most satisfactory yet proposed. They suggest advantages as follows: (1) It places the baptistry in a position where it can be easily seen by the whole congregation; (2) in this way the baptistry takes up less space that is valuable for other purposes; (3) it places the choir in the best possible location on a slightly elevated platform immediately back of the speaker's stand.

IMMANUEL BAPTIST CHURCH, NASHVILLE, TENN.

The unique and beautiful baptistry is at the right, while the communion table is at the left, the church being "built around the ordinances."

The ordinance of baptism has little meaning and message save as it can be easily and distinctly seen. In locating the baptistry this fact must be kept in mind. An evangelist of wide experience in various sections declares that very many baptistries are so placed that the symbolic burial largely loses its significance because the congregation cannot see with ease.

Some ministers prefer that the candidates shall go up from the water by an exit over against the entrance, thus symbolizing the passing on to a new life. Dr. F. B. Meyer and others have strongly advocated this plan. If this seems desirable, arrangements should be made for it in the structure of the baptistry and the conveniences attending.

It is hardly necessary to suggest that the water in the baptistry should be brought to a proper temperature to secure comfort both for the minister and for those who are to be baptized.

Entrance into the water and exit from the water should always be so arranged as to be away from the view of the audience. The burial is, of course, the only part with which the audience is concerned.

For a practical discussion, from the viewpoint of the architect or builder, of the construction of the baptistry, its size and other problems arising, see Chapter XXV, "Hints for Practical Builders."

THE BAPTIST CHURCH, ROCKLAND, MAINE

Back of the pool is a beautiful scenic picture in which a river flows down from snow-capped mountains, the picture being so adjusted that to the audience the ordinance appears almost as if administered in the river with its flowing water.

XIV

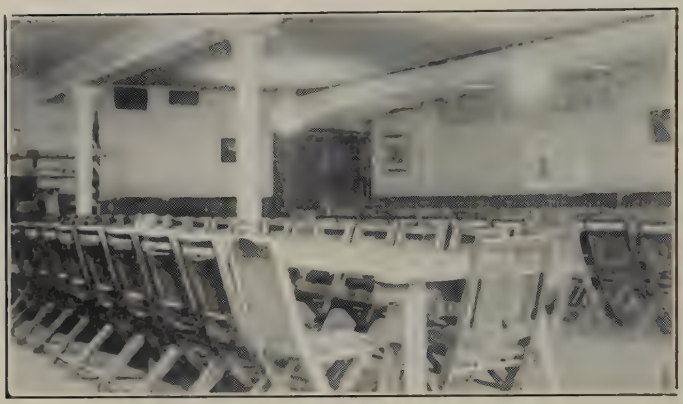
MEETING SOCIAL DEMANDS

Among the multiplying demands upon the church building, we must not overlook or neglect the social demands. Helpful ministry in the social realm will bring blessings in all departments of the church life. We indicate here the more important rooms which may be provided for social purposes.

1. The social room. This is usually a large room on the ground floor adapted to all kinds of social purposes. It may serve as the play room for the children; it may be the rendezvous for the boy scouts, or other groups of boys and young men; it may provide for entertainments of all kinds, such as banquets, lectures, stereopticon lectures, moving pictures and musicals. A stage with dressing rooms should be provided. Special attention should be given to light and ventilation.

BASEMENT FLOOR, FIRST BAPTIST CHURCH, SAN DIEGO, CAL.

This great basement floor is used for social and recreational purposes. Arrangement is made for a motion picture machine, for gymnastic exercises, and for other practical uses. A modern kitchen adjoins. This space is not at present needed for Sunday-school purposes, but it constitutes a great reserve which is a sort of insurance against future emergencies.



BANQUET ROOM, CALVARY BAPTIST CHURCH, WASHINGTON, D.C.
Offers seats for 200.

SOCIAL ROOM, FIRST BAPTIST CHURCH, CLARKSVILLE, TENN.

This spacious and attractive room, besides housing a department in the Sunday school, offers social and recreational facilities not only for the church and Sunday school, but on occasions for the entire community.

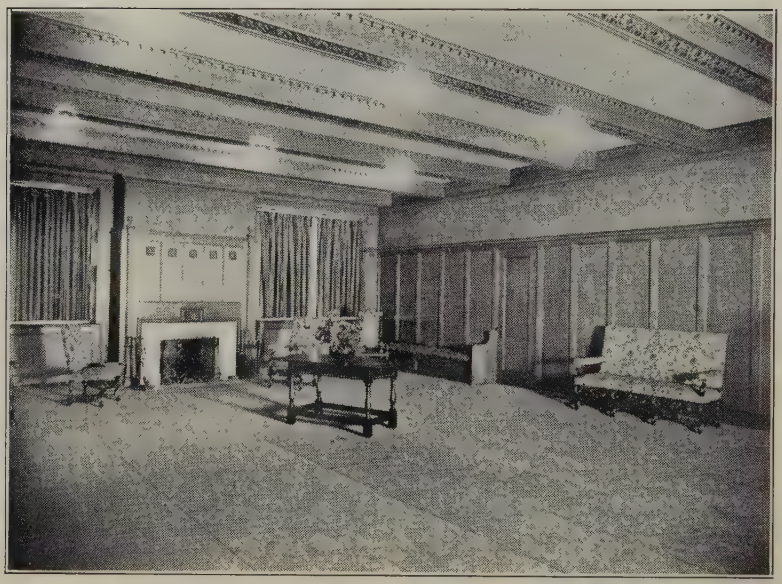
2. A ladies' room. The women of the church ought to feel that a room, or suite of rooms, is provided and furnished especially for their use. Here they will hold the missionary society, the sewing circle, the social tea, and other meetings. In this room, as elsewhere throughout the building, the ability and tastes of the congregation must determine the style of finish and furnishings; the ideal would seem to be simple elegance combined with such durability as would permit constant use for all needed practical purposes.

3. An officers' room. The deacons or stewards, or other church officers, may well be provided with a special room, suitably furnished. Thus the pastor will meet his official family under conditions which will be impressive and becoming.

4. A church parlor. This room may well be distinct in type and furnishing from the social room and the ladies' room mentioned above. Church weddings which do not invite numbers sufficient to

SOCIAL ROOMS, FIRST BAPTIST CHURCH, SAN DIEGO, CAL.

A few seats such as are here shown, judiciously placed in large class rooms, will make a pleasing impression. They will be ready for service when such rooms require to be transformed for social uses.



A CHURCH PARLOR

Beautiful social rooms like this serve many useful purposes in church life. This room constitutes a part of the varied equipment by means of which the Lake Avenue Baptist Church, Rochester, N.Y., seeks to minister to its community.

justify the use of the main auditorium, and many gatherings for social and other purposes, will find this room convenient and serviceable.

5. Senior and Adult class rooms may be adapted to social purposes.

6. The kitchen. The arrangements may be simple and inexpensive or they may be elaborate and complete. In large buildings dumb waiters or kitchenettes may well serve rooms which are remote from the main kitchen. Suggestions as to the location may be gleaned from various drawings in these chapters. (See especially pages 151, 157, 160, 164, 167.

KITCHEN IN LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N.Y.

The kitchen in the Lake Avenue Baptist Church, Rochester, N.Y., is furnished almost as elaborately and completely as the kitchen in a metropolitan hotel. (See plans, page 167.)

SERVING ROOM (adjoining kitchen) IN FIRST BAPTIST CHURCH, SPRINGFIELD, MO.

In larger churches, where extended serving is contemplated, a special serving room should be provided. See drawings in Chapters XIX to XXI.

XV

THE GYMNASIUM AND THE SWIMMING POOL

The churches are seeking in a variety of ways to minister to the social needs of the people. Rapid development in this direction may be expected in the near future. Along this line of development it is but natural that problems and perils shall beset the path of the churches. It is hardly within the province of this book to discuss the general activities by which the churches may seek to minister to their constituencies. Since questions are arising in many quarters regarding the gymnasium and the swimming pool in proposed church buildings, and since these involve architectural problems, a word in this connection may not be amiss.

It should be said that developments in this line are so new and as yet so little tested we would not be justified in making sweeping or final deductions. Some more or less simple observations must suffice.

The Question of Climate Must Have Weight

In the northern section of our country, and in Canada, indoor recreations are much more needed than in the sunny climes farther south. Where the earth is covered for large parts of the year with snow and ice and where people cannot so readily seek recreation and pleasure in the open, the people must of course more largely provide for themselves means of recreation and pleasure indoors. In general, recreation in the open is more wholesome and desirable. Overlooking this obvious difference in climate, some churches in the Southland have made somewhat elaborate provision for indoor amusements only to be later disappointed in finding these provisions unappreciated and unused.

The Location of the Church Must Be Considered

Does the church minister to a suburban community? Is the church located in a quiet, conservative village or town? Is the church in a mill district where the play life of the people, and especially of the children, needs to be directed and supervised? Is the church at

or near the center of some great down-town district where, in order to get a hearing for the gospel message, extraordinary inducements must be offered?

SOME QUESTIONS REGARDING RELATIVE IMPORTANCE MAY WELL BE RAISED

Few churches can provide adequately for the modern Sunday school and at the same time make any extensive provision for recreation. Choice must usually be made between *adequate provision for the Sunday school on one hand and partial provisions with certain equipment for recreation on the other hand.* Each local community must of course determine this choice for itself, bearing in mind that the primary business of the church is to preach and teach the Bible. The church building is erected, above and before everything else, for preaching and teaching purposes.

To be sure, the gymnasium may be used for Sunday-school purposes; the hall may be cleared on Saturday night and put in shape for some department or class in the Sunday school. Strangely enough the Junior department is generally assigned to the gymnasium. The impressionable boys and girls who are most deeply influenced by their environment are thus assigned to a room which inevitably brings over from the week-days the associations of recreation and sport. If the gymnasium is to be used for Sunday-school purposes, the space should by all means be assigned to the adult department or to some adult class.

GENERALLY THE QUESTION OF EXPENSE IS NOT UNIMPORTANT

A real gymnasium is expensive, as is also a swimming pool. The play-room or social room which the architect may by courtesy mark in the plans "gymnasium" can be had at low cost. It is frequently located on the basement floor, probably beneath the auditorium. It has usually a low ceiling with many posts, and can be called a gymnasium only by a long stretch of courtesy. A real gymnasium, approximating anything like the standard in height or ceiling, must occupy at least the space of two floors or two stories. It must have good ventilation. In the nature of the case, it must be expensive.

The swimming pool is also a costly provision: Consider the weight involved in 50,000 to 100,000 gallons of water. Consider also the

possibilities to the building in case this water should at any future time seep or escape in a way to affect the foundation. One prudent church committee put down seven distinct layers as the foundation for the swimming pool. They made the pool safe, but they did it at heavy expense.

While the initial expense of the gymnasium and the swimming pool is considerable, the maintenance expense is not to be overlooked. A gymnasium is of little value unless the church employs a physical director. Such physical directors as find it possible to blend the work of the gymnasium with the spiritual and educational ends sought in the Sunday school are not always available.

A wise director is needed for the swimming pool quite as much as for the gymnasium. A boy in a certain church pool was seized with cramps and sank in water seven feet deep. The alert director quickly brought the lad to the surface. What if there had been no director? Other considerations than mere physical safety require a trained director. Here again the director must have the fine ability to weave all the appeals and uses of the pool into the general spiritual ends proposed by the Sunday school.

The expense of the water which must be daily renewed, should not be overlooked. Ask your water commissioner, or other proper official, what a daily supply of 50,000 to 100,000 gallons of water will cost.

A play-room with simple devices for exercise together with shower-baths and lockers which can be economically installed will in many cases, serve the recreational needs of the community.

We have thus briefly presented some of the questions which arise in connection with the gymnasium and the swimming pool. Both of these agencies are, under certain conditions, serving valuable ends in church and Sunday-school life. We have sought to indicate some of the many problems which should be fairly faced by those who contemplate the installation either of the gymnasium or the swimming pool in the church building.

Dr. W. H. Geistweit, St. Louis, Mo., has had extended and successful experience as pastor in dealing with the problems of great "down-town" churches. In a personal letter, Dr. Geistweit offers the following suggestive comments which may well find record here:

"Concerning the swimming pool and gymnasium, I cannot agree with some others that these things should be in the church building. Indeed I am not sure that the church should undertake that work at all. But if it is undertaken, by all means keep it outside of the church building; and then put it under such regulations that it will not stampede the real work of the church. When religious service is on, the gymnasium and pool ought to be locked up.

"I have tried the gymnasium in the church building; also the reading room. Neither worked successfully. Young men don't like to loaf in the church building. We cannot do in a church what the 'Y' did in France. True, parish houses may be built for much of this work; but the minister will have a heavy burden to carry in being responsible for all that goes on. Too often the athletic work cripples everything else in the church. I shrink from the very thought of running a swimming pool and gymnasium in the building."

XVI

PLANS FOR SUNDAY SCHOOLS NUMBERING 100

Sunday schools numbering one hundred pupils or less constitute the great majority of our Sunday schools. It is said that we have no less than 60,000 one-room church buildings in the United States. The larger number of these are of course in the country and in villages, though one-room church houses are to be found in all of our cities.

The one-room church building is a legacy from the past. It reminds us of the days when provision was made only for preaching and when the Sunday school was lightly regarded. The one-room house has been especially popular in the country because it can be erected by carpenters without the trouble or expense of the architect's service.

The one-room building will not readily give way to better types. It is entrenched in tradition and from custom and association is regarded with a measure of sacred reverence. But the one-room church house must pass, as the one-room school house is rapidly passing. Churches, no more than families, can live properly and function as they ought in one-room buildings. Great denominational agencies are joining with other strong movements in the effort to hasten the passing of the one-room meeting house.

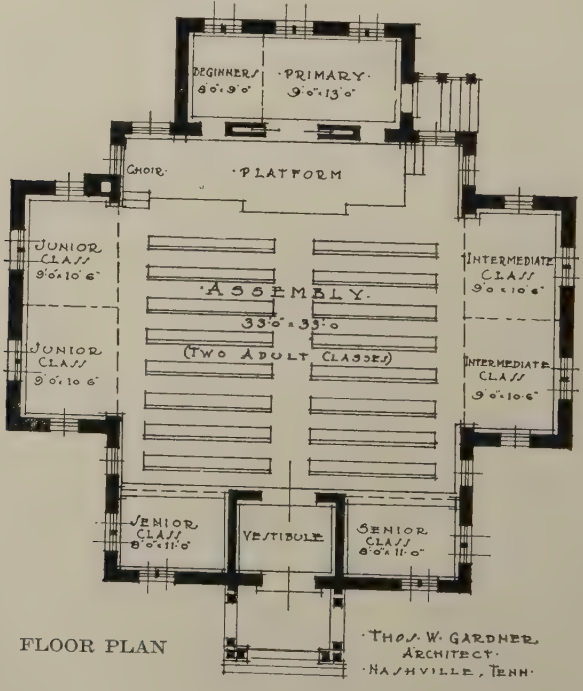
In the designing of small churches, as with small homes and other small buildings, we encounter special difficulties. Every house ought to have the individual touch of an architect. This high ideal is not attainable, though evidences are abundant that progress is being made in that direction. Since many small churches must be built without the personal guidance of skilled church architects, "stock plans" of carefully designed and acceptable buildings sometimes offered by architects at low cost may serve a good purpose. Many attractive and satisfactory buildings have been erected with the use of such plans.

In this chapter, and the chapter following, we seek to point the way to buildings which will adequately house the small church and Sunday school.

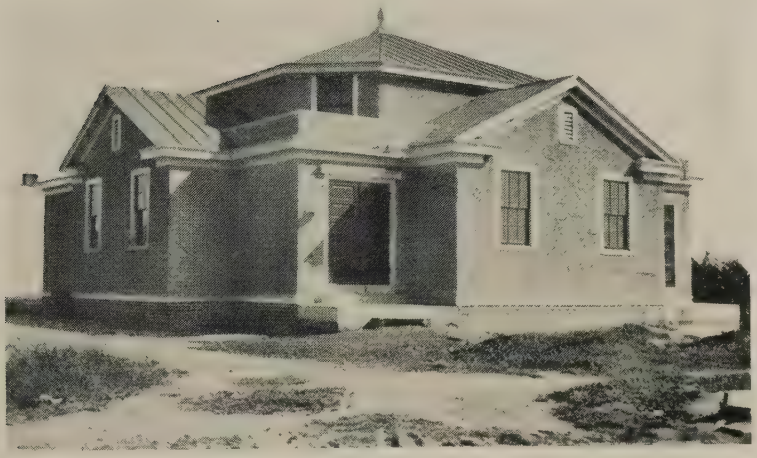
—Thos. W. Gardner, Architect.

PLAN I. THE DONELSON (TENN.) BAPTIST CHURCH

An attractive Old English design; cost (1917) in native stone, with basement furnace, $4,000. Main auditorium seats 155; total capacity 240. Eight Sunday-school rooms.



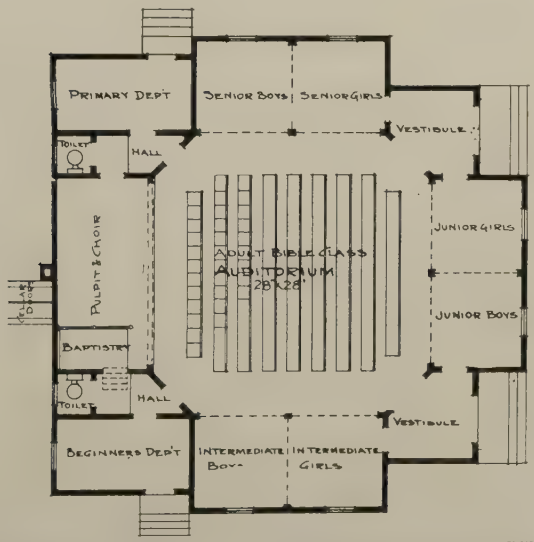
FLOOR PLAN



—H. L. Cain, Architect.

PLAN II. THE BOULEVARD BAPTIST CHURCH, RICHMOND, VA.

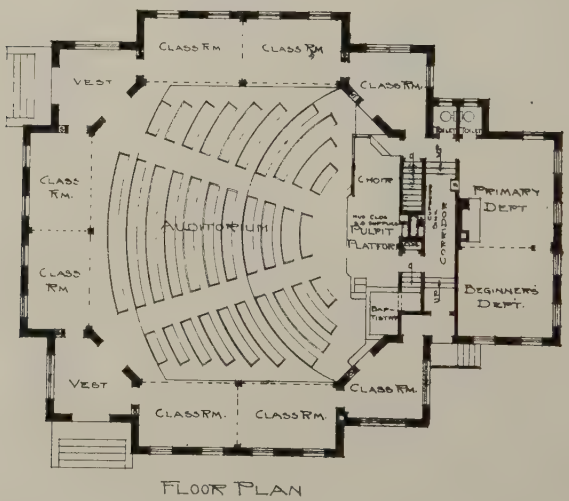
This building was erected (1919) at a cost of $4000.



FLOOR PLAN, BOULEVARD BAPTIST CHURCH, RICHMOND, VA.

INTERIOR VIEW

The view here presented shows the interior of the Boulevard Baptist Church, Richmond, Va., looking from the platform toward a corner vestibule. The rooms are separated from the auditorium by accordion doors.

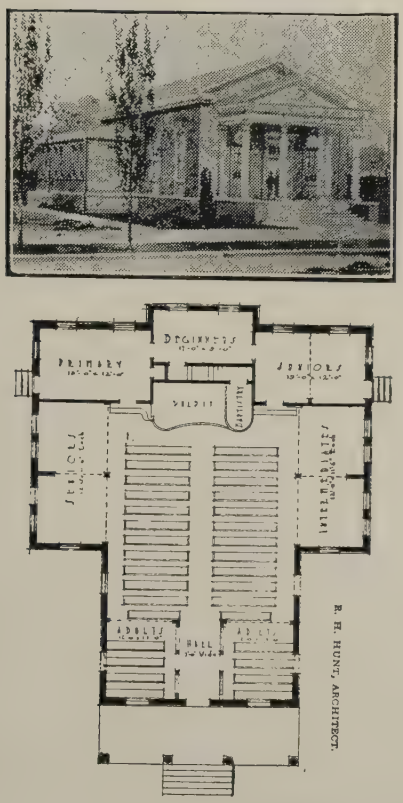


FLOOR PLAN

—*H. L. Cain, Architect.*

THE BAPTIST CHURCH AT ATLANTIC, VA.

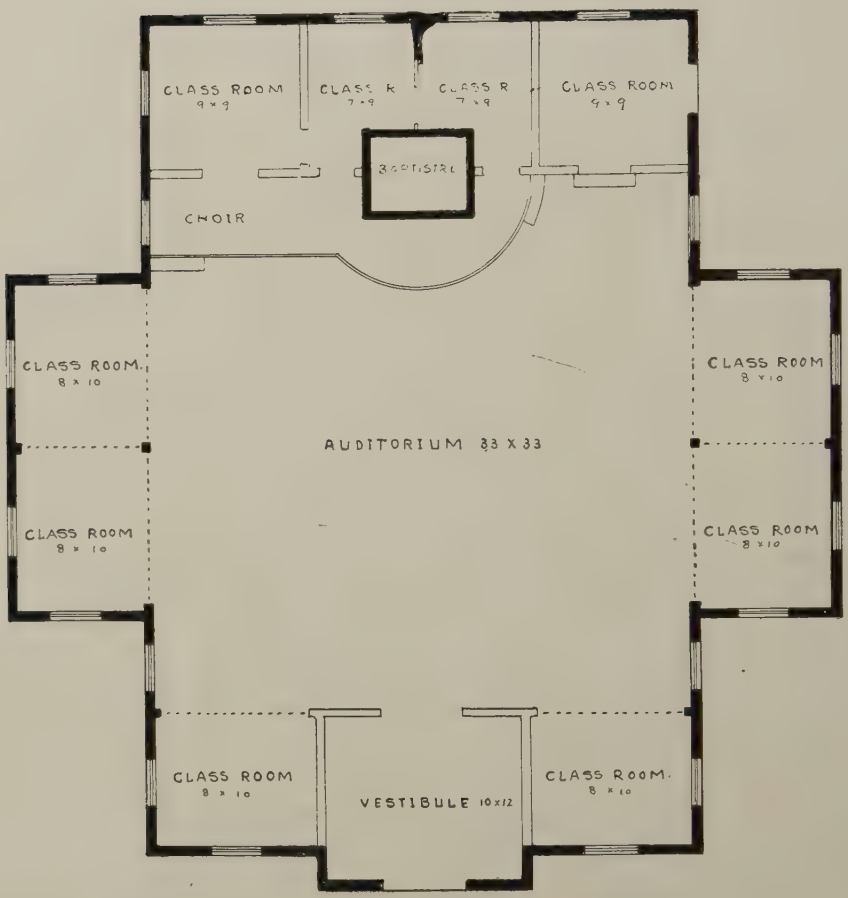
The floor plan of the Baptist Church, Atlantic, Va., is an extension and enlargement of Plan II. The auditorium is enlarged and the building has an extension at the back. Stairs just back of the choir lead down to the heating plant in basement. Observe provisions for social life suggested by the sink and cupboard shown in the corridor and in the grate shown in the Primary room.



This plan provides nine class rooms and offers ample provision for a school numbering one hundred. Six class rooms adjoining the auditorium are provided with movable partitions and, on special occasions when unusual numbers attend, these rooms can be used to reinforce the main audience room, almost doubling its normal capacity.

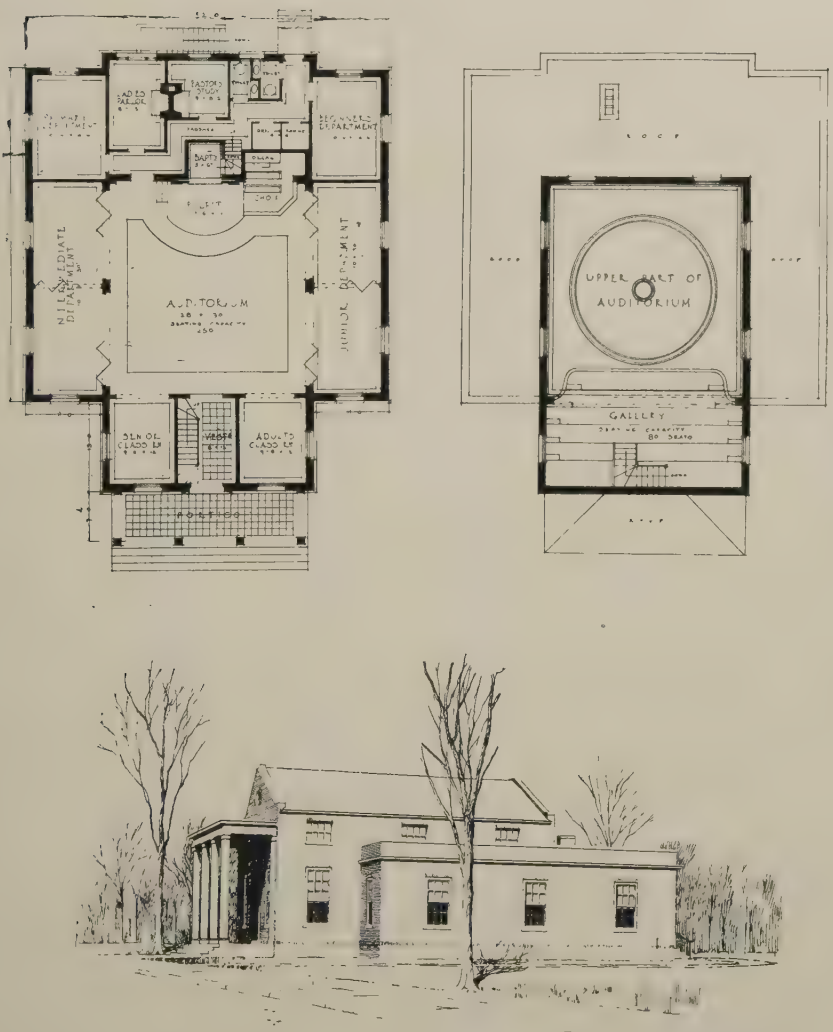
PLAN III. SKETCH FOR CHRISTIAN CHURCH

The designing of small church buildings involves special difficulties. Architects of ability and wide practice can hardly be expected to give large attention to the problems involved here. Unfortunately many communities undertake to erect these small buildings without the guidance of an architect. While every church building ought to receive the special and individual treatment of a skilled architect, it is wiser, as has already been pointed out, to secure at low cost "stock plans" from a reputable architect than to build without an architect.



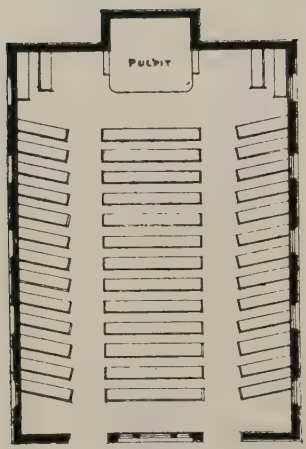
PLAN IV. —*J. E. Greene, Architect.*

Plan IV places the vestibule inside of the building and offers class rooms on either side of the vestibule. The plan provides for a total of ten class rooms, six of which have movable partitions and may be used to re-enforce the assembly room on special occasions, making a total seating capacity in the auditorium of 260. The plan also provides a baptistry. If arrangement for the baptistry is omitted the pulpit platform and the two class rooms at the rear may be somewhat enlarged. This plan offers good results at low cost and has been widely used.

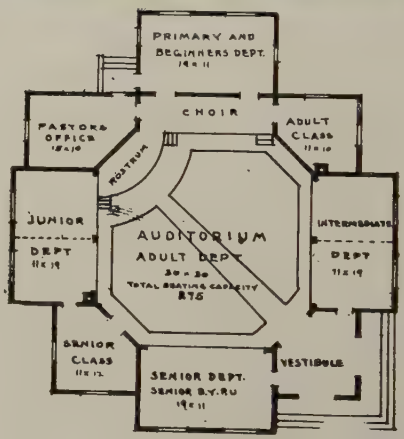


—*J. J. Baldwin, Architect.*

PLAN V. A SUGGESTION FOR NEW CONSTRUCTION OR FOR REMODELING A ONE-ROOM BUILDING. TOTAL SEATING CAPACITY 250.



THE OLD TYPE CHURCH



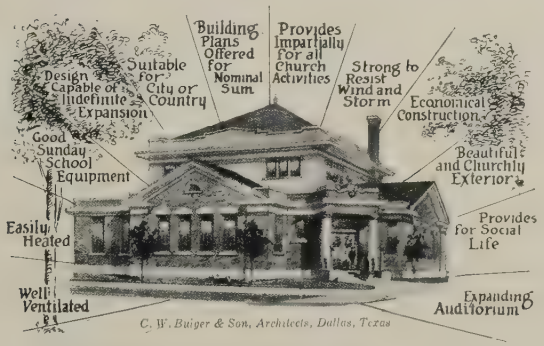
—*C. W. Bulger & Son, Architects.*

PLAN VI. A NEW TYPE CHURCH

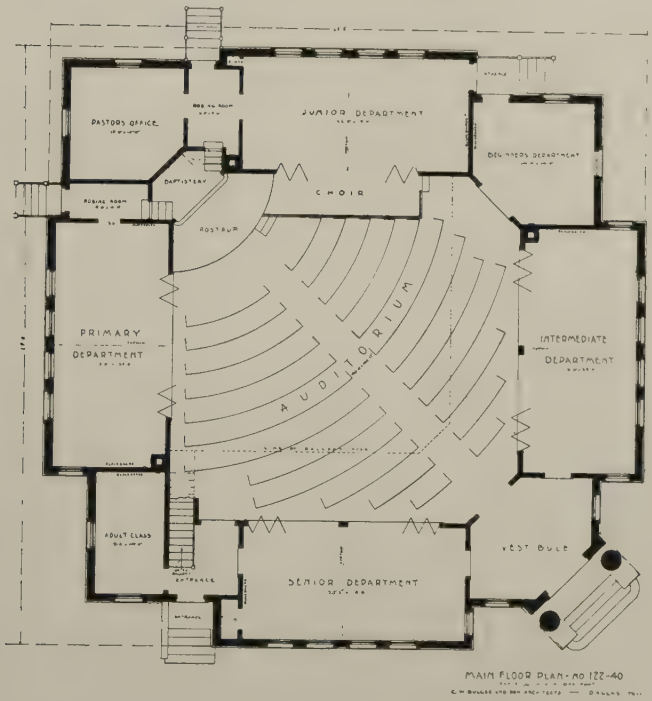
In Plan VI we have a complete, compact and economical building. The outside dimensions are 54x60 feet. The building has been built several times in brick for $6000. It is very strong because of its shape, the four wings acting as braces to the center.

Compare the old with the new—(1) As regards appearance; (2) As to ease and convenience in heating. Observe the vestibules in the new type and the possibility of heating only such portions as may be required; (3) As regards Sunday-school facilities. The new type offers nine Sunday-school rooms, nearly all opening into the main auditorium and augmenting its seating capacity; (4) As regards cost. The new type proposed avoids long reaches and expensive trusses and can be erected at moderate cost.

Plans IV and VI especially have been successfully erected in various parts of the country with the use of stock plans offered at low cost by the architects.


Building Plans Offered for Nominal Sum
Provides Impartially for all Church Activities
Strong to Resist Wind and Storm
Economical Construction
Beautiful and Churchly Exterior
Provides for Social Life
Expanding Auditorium
Well Ventilated
Easily Heated
Good Sunday School Equipment
Design Capable of Indefinite Expansion
Suitable for City or Country
C. W. Bulger & Son, Architects, Dallas, Texas

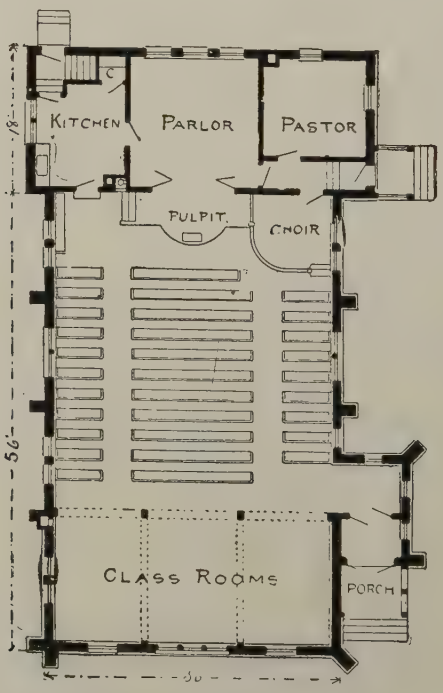
PLAN VII. EXTERIOR PERSPECTIVE



PLAN VII. FLOOR PLAN

Plan VII is an enlargement of Plan VI, the auditorium being 40x40 feet. The fine dotted line indicates a gallery which supplements the seating capacity, and offers additional Sunday-school facilities. Total seating capacity 430.

PLAN VIII. EXTERIOR PERSPECTIVE



PLAN VIII. FLOOR PLAN

—D. B. Hyer, Architect.

THIS BUILDING OFFERS THE SAME FLOOR PLAN AS PLAN VIII

In Plan VIII we have a good combination building. The rooms marked "Kitchen," "Parlor," and "Pastor" may, of course, be used for class rooms; thus the building offers six separate class rooms. The three class rooms at the rear of the assembly room may be thrown together for prayer-meeting, women's missionary meetings, and similar small gatherings. This plan appears in the book, "Churches and Chapels," written by F. E. Kidder, and is presented here by permission of the William T. Comstock Company, publishers of the book.

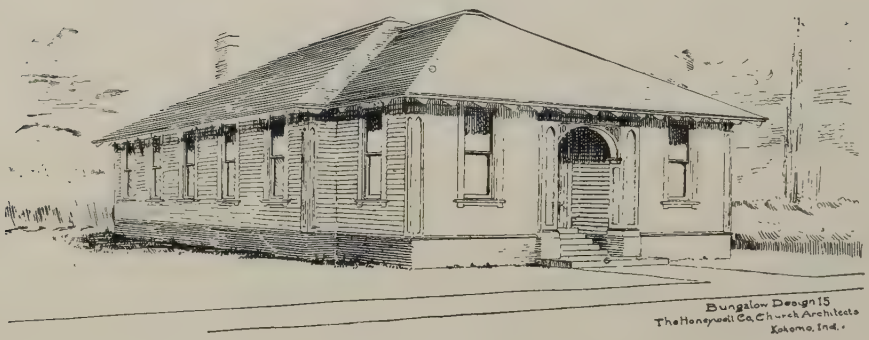
Mr. Kidder offers the following notes:

Brick with stone trimmings, shingle roof, cost $4000 to $5000. (Under present conditions the cost will be much greater.)

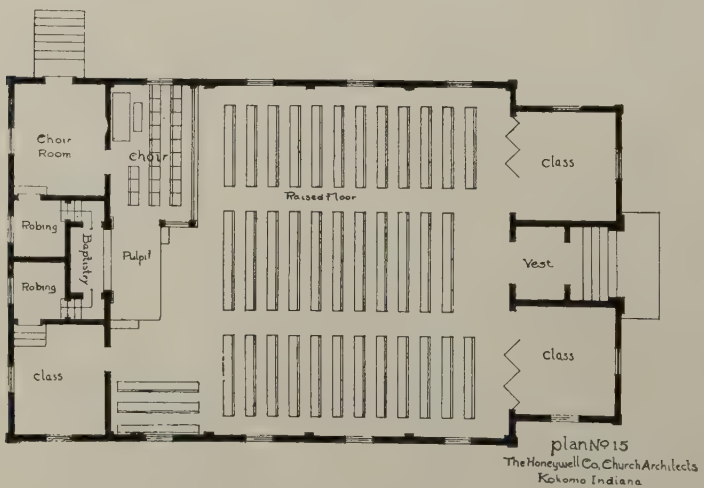
Seating capacity: pews, 236; three class rooms, 108; ladies' parlor, 40; total in sight and hearing of the speaker, 484.

Height of walls above floor, 12 feet; height of ceiling, 19 feet 6 inches; height of finial above sidewalk, 41 feet.

This design is especially happy for a town or village church.



EXTERIOR, PLAN IX.



FLOOR PLAN (IX.)

In some new growing sections, churches are unable to build to meet the permanent needs of the community. Why not erect for temporary use such a building as the above?

XVII

PLANS FOR SUNDAY SCHOOLS NUMBERING 100 TO 150

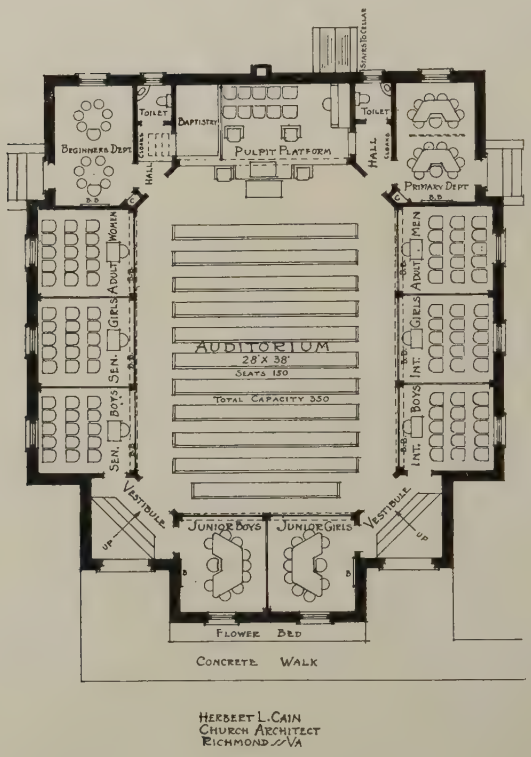
In the preceding chapter we offered plans for schools numbering about 100. In this chapter we offer slightly larger plans. The general outline of organization and floor-space requirements remains about the same.

It will be observed that in these plans we find Sunday-school rooms grouped about the auditorium so that with the use of movable partitions they may open into the auditorium and supplement its seating capacity. This arrangement is desirable both for economy and convenience in buildings such as we are now considering.

A study of the various types of movable partitions shown in Chapter VI will serve as a guide in determining the particular kind of partition suitable in any given case. The rolling partitions, either vertical or horizontal, offered by the J. G. Wilson Corporation, and other companies, are desirable where the cost need not be the determining factor.

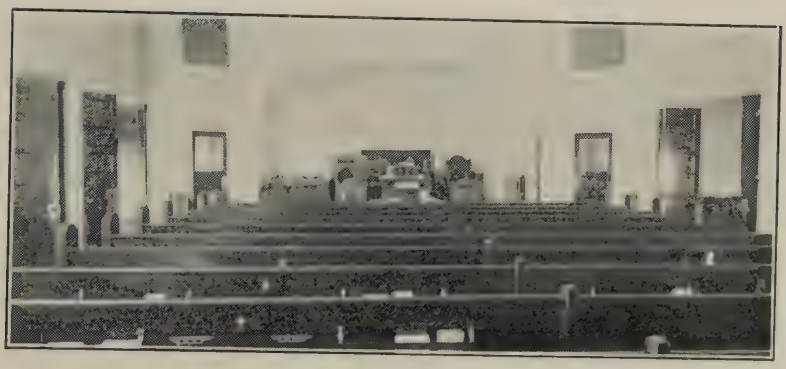
It will be observed that basements are not generally shown in connection with these buildings. The larger number of them have at least a basement for the heating plant. Where conditions favor a basement and where the basement seems to be required for serving and social purposes, it can usually be provided without great additional cost.

We present as suggestions for the housing of Sunday schools numbering 100 to 150, four carefully selected buildings, two of them one-story buildings and two of them offering a main floor and ground floor. In connection with the smaller buildings offered in the preceding chapter, we suggested that under certain conditions the use of "stock plans" may be advisable. In the case of buildings, such as are presented in this and succeeding chapters, the conditions vary so widely and the problems are so many and so grave, each building requires personal and individual attention on the part of an architect in order to assure satisfactory results.



PLAN X. THE RALEIGH FORBES MEMORIAL BAPTIST CHURCH, RICHMOND, VA.

This design, as will be seen, is an enlargement of Plan V, designed also by Mr. H. L. Cain. As will be observed, the normal capacity of the auditorium is 150, while the opening of the eight adjoining rooms makes the total capacity, within sight and hearing of the preacher, 350. The Bapsubo Table (see page 222) is proposed for the Primary and Junior departments. The toilets suggested are not impracticable even in country districts, since septic tanks may be provided at small expense.

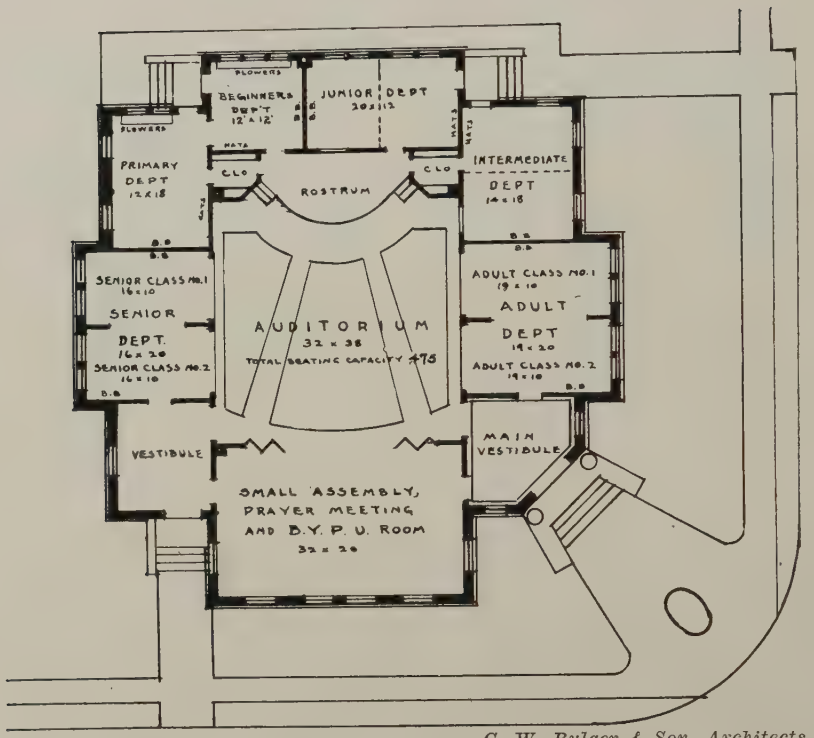


INTERIOR RALEIGH FORBES MEMORIAL BAPTIST CHURCH, RICHMOND, VA.

Piano and choir are back of pulpit; baptistry is at the left. On either side may be seen arrangement of rooms for classes.

THE RALEIGH FORBES MEMORIAL BAPTIST CHURCH, RICHMOND, VA.

Cost (1918) about $16,000. With the use of less expensive material, a building of this design might be erected at a much smaller cost.



—C. W. Bulger & Son, Architects.

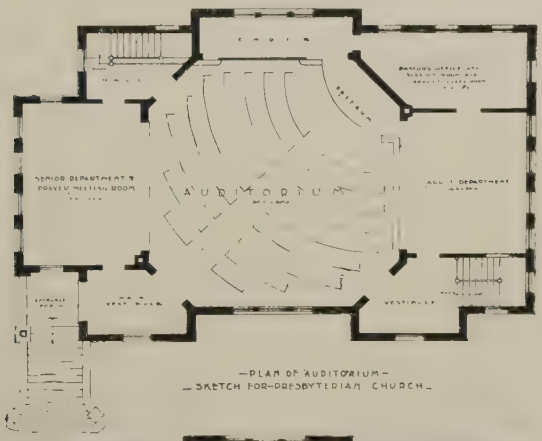
PLAN XI. SKETCH FOR PRESBYTERIAN CHURCH

For schools of the type now in question, Plan XI offers ample provision. Separate department rooms are offered for each of the six departments, and in all cases these rooms have entrances direct from the outside or from a vestibule. The Junior, Intermediate, Senior and Adult departments have movable partitions which divide them for class use, thus affording both department and class rooms without duplicating space.

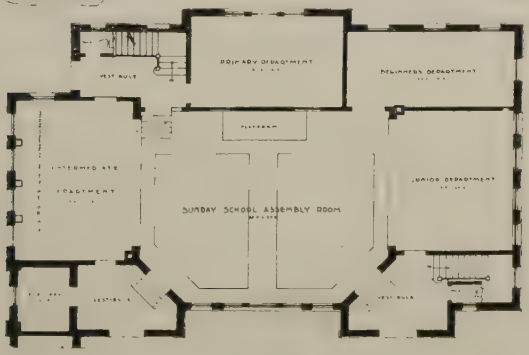
Note special provisions, as built-in blackboards, hangers for hats and wraps, and stands for flowers.

A feature of this building is the movable partition inclosing the "Small Assembly" and the Senior and Adult departments, making it possible to open these large rooms into the main auditorium for special occasions. Thus while the audience room is in itself sufficient for usual congregations, it is capable of expansion until nearly five hundred people can be seated within sight and hearing of the speaker on the rostrum. The exterior is about the same as for Plan VII.

—FRONT ELEVATION
—SKETCH FOR—PRESBYTERIAN CHURCH—



—PLAN OF AUDITORIUM—
—SKETCH FOR—PRESBYTERIAN CHURCH—



PLAN OF GROUND FLOOR—
—SKETCH FOR—PRESBYTERIAN CHURCH

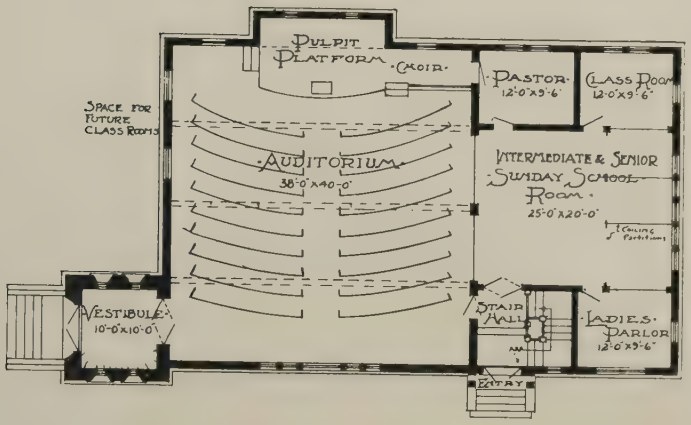
—C. W. Bulger & Son, Architects.

PLAN XII REPRESENTS AN EFFORT TO PROVIDE AT LOW COST FOR A SUNDAY SCHOOL OF 150 MEMBERS

—*E. O. Brostrom, Architect.*

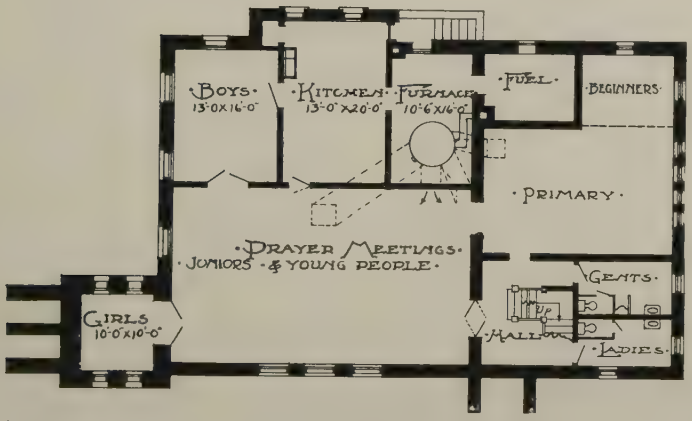
THE REFORMED PRESBYTERIAN CHURCH, KANSAS CITY, MO. PLAN XIII.

This church is a unique bungalow type which conforms to the prevailing type of buildings in its section of the city. The tower gives a somewhat churchly effect, and the floor plan is convenient and economical. The foundation and tower are native stone, while the main building is stucco. Shows how a small departmental Sunday school may be well cared for at moderate cost. An auditorium pleasing in its simplicity.



—*E. O. Brostrom, Architect.*

PLAN XIII. THE REFORMED PRESBYTERIAN CHURCH, KANSAS CITY, MO., MAIN FLOOR



PLAN XIII. THE REFORMED PRESBYTERIAN CHURCH, KANSAS CITY, MO., BASEMENT FLOOR

XVIII

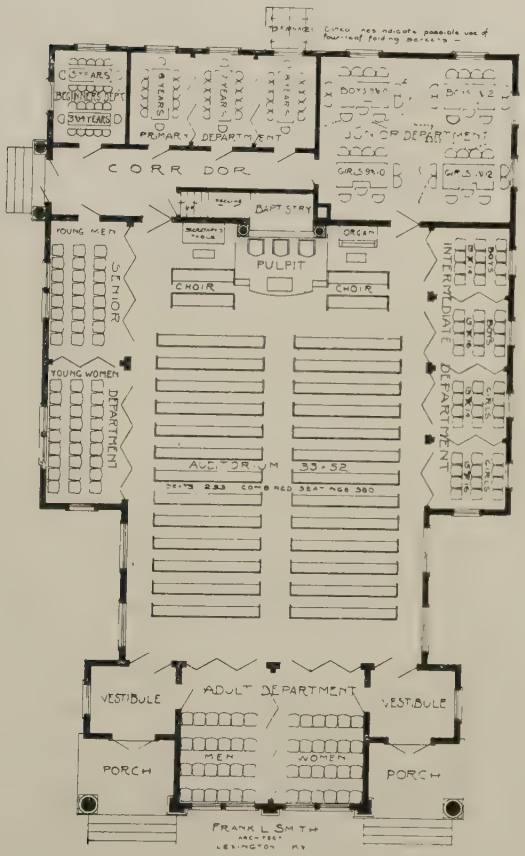
PLANS FOR SUNDAY SCHOOLS NUMBERING 150 TO 300

The type of buildings which we come now to consider, intermediate between the small and the large, offers exceptional difficulties. The very small building limits itself as regards design and floor-space arrangement, while the really large building allows wide scope for the genius of the architect. Architects in many sections declare that in the type of building now under consideration they find their greatest perplexity and face their most serious problems.

In this chapter we seek especially by means of the various drawings offered to define clearly the relative departmental and class needs of the schools which number 150 to 300 pupils. We hope also to offer valuable suggestions to committees and architects who are called to design buildings of this kind. Plan XIV may be especially helpful as constituting a chart for guidance in providing for the various departments. The departments, the classes and the probable numbers in each class are all clearly indicated. Resourceful architects will find a variety of ways in which such needs as are thus outlined may be provided.

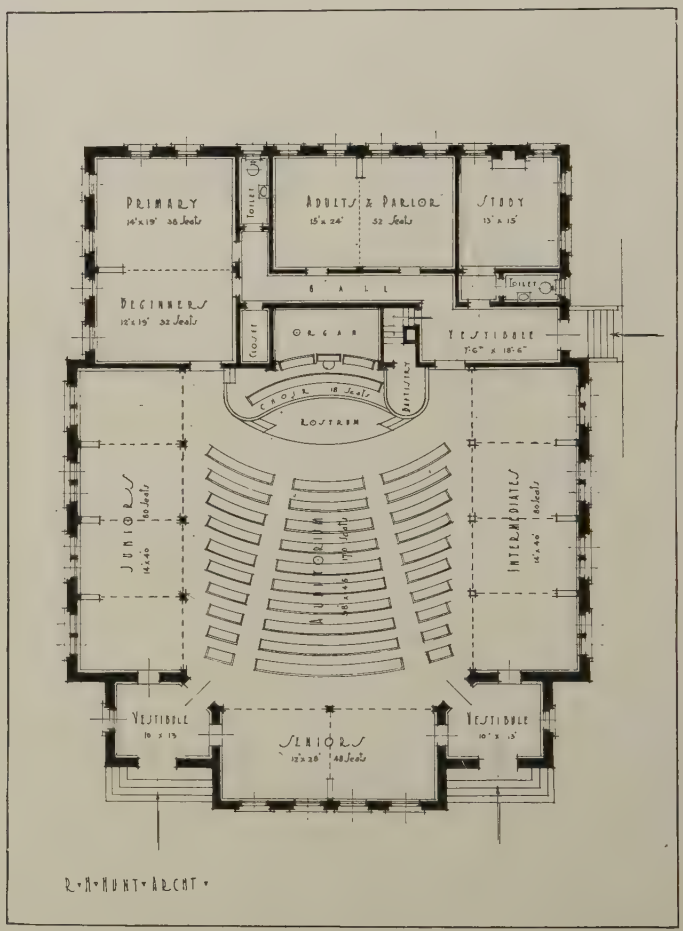
Of the five plans offered in this chapter, all are unified buildings, that is, buildings which group Sunday-school rooms around the auditorium, except Plan XVII, which shows no Sunday-school evidences in connection with the auditorium. Such separate auditoriums are generally preferred and have much to commend them. They involve of course larger expense for a given amount of space than the unified buildings.

With these buildings, as elsewhere throughout these pages, the exterior shown indicates how in a given instance and under local conditions the particular floor plans were developed. In the hands of other architects and under other conditions, the floor plans might, with slight re-arrangement, be developed into other types of exteriors.



PLAN XIV.

A good combination of convenience and economy is to be found in Plan XIV. Beginners, Primaries and Juniors have their own department rooms enclosed in plastered walls so that they may conduct worship and drills without disturbing other departments. Movable partitions provided between the rooms permit department assembly and work. Total seating capacity 380.



PLAN XV.

In Plan XV we have another effort to plan adequately for a Sunday school of one hundred and fifty to two hundred and fifty in a one-story building. A feature of this building which will be appreciated by Sunday-school workers is the provision of department rooms which subdivide by movable partitions into class rooms, thus avoiding duplication of space by making possible the use of the same floor space for department and class purposes. Total seating capacity 450.

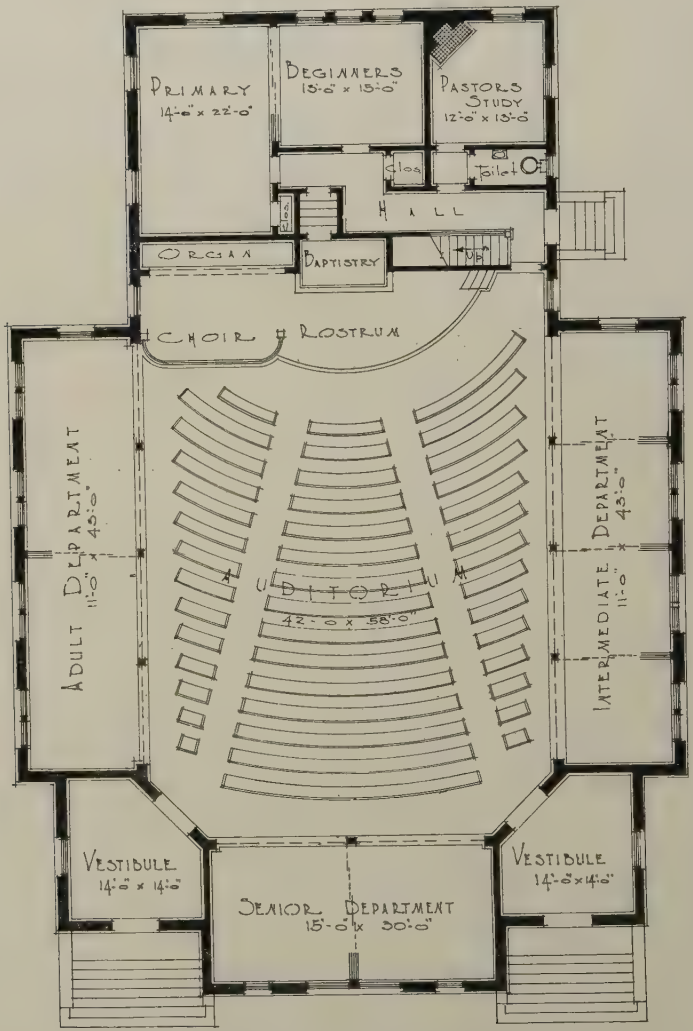
—*R. H. Hunt, Architect.*

EXTERIOR, PLAN XV.

—*R. H. Hunt, Architect.*

EXTERIOR, PLAN XVI.

This rear section is two-story; Juniors are provided for on upper floor.



—*R. H. Hunt, Architect.*

PLAN XVI. SKETCH FOR CHRISTIAN CHURCH

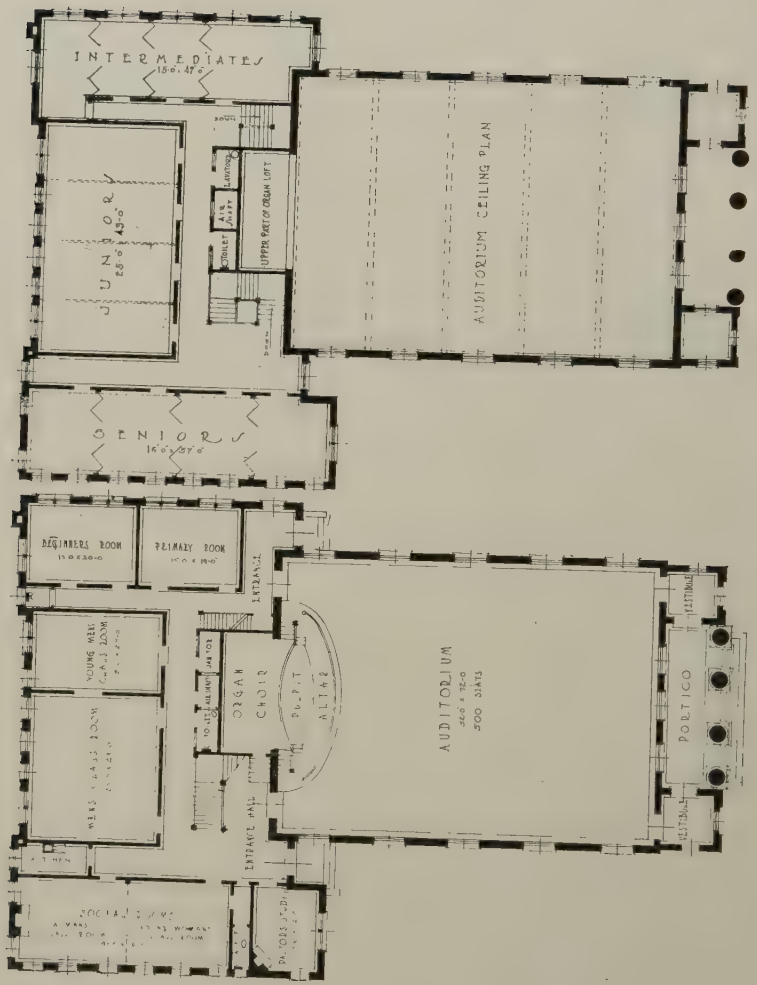
Plan XVI is similar to Plan XV, but implies a larger building. The auditorium seats 400, with a total capacity when adjoining rooms are open of 600.

THE METHODIST EPISCOPAL CHURCH, SOUTH, MOULTRIE, GA.
PLAN XVII

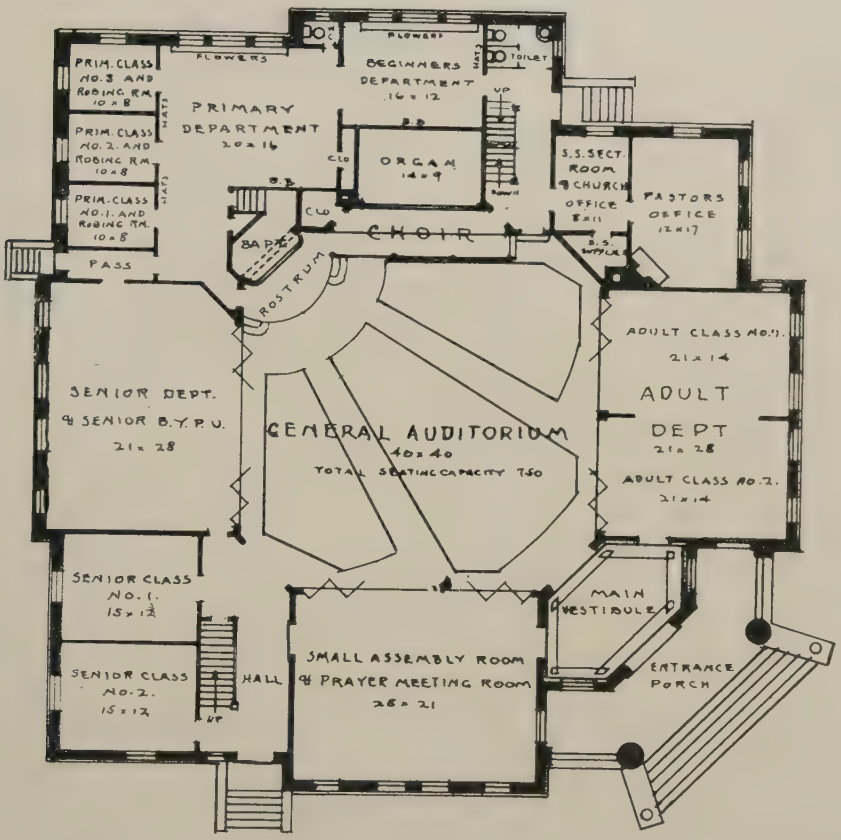
The building of the Methodist Episcopal Church, South, Moultrie, Ga., Plan XVII, has been much admired by thoughtful Sunday-school workers. Ample provision is made for social purposes and for educational ends, while the spacious auditorium accommodates all the larger assemblies, including the Sunday school.

Observe that Juniors, Intermediates and Seniors have department rooms, which may be subdivided into class rooms, thus permitting the use of the same floor-space for both department and class use. Note also kitchen, and toilet on both floors.

The men's class room or the Junior assembly room offers a secondary auditorium for smaller assemblies.



PLAN XVII. THE METHODIST EPISCOPAL CHURCH, SOUTH, MOULTRIE, GA.
—*T. F. Lockwood, Architect.*


PRIM. CLASS NO. 3 AND ROSING RM. 10 × 8
PRIM. CLASS NO. 2. AND ROSING RM. 10 × 8
PRIM. CLASS NO. 1. AND ROSING RM. 10 × 8
FLOWERS
PRIMARY DEPARTMENT 20 × 16
BEGINNERS DEPARTMENT 16 × 12
TOILET
ORGAN 14 × 9
CLO
CHOIR
BAPT.
ROSTRUM
PASS
S.S. SECT. ROOM & CHURCH OFFICE 8 × 11
PASTORS OFFICE 12 × 17
SENIOR DEPT. & SENIOR B.Y.P.U. 21 × 28
GENERAL AUDITORIUM 40 × 40
TOTAL SEATING CAPACITY 750
ADULT CLASS NO. 1. 21 × 14
ADULT DEPT 21 × 28
ADULT CLASS NO. 2. 21 × 14
SENIOR CLASS NO. 1. 15 × 12
SENIOR CLASS NO. 2. 15 × 12
HALL
SMALL ASSEMBLY ROOM & PRAYER MEETING ROOM 28 × 21
MAIN VESTIBULE
ENTRANCE PORCH

—*C. W. Bulger & Son, Architect.*

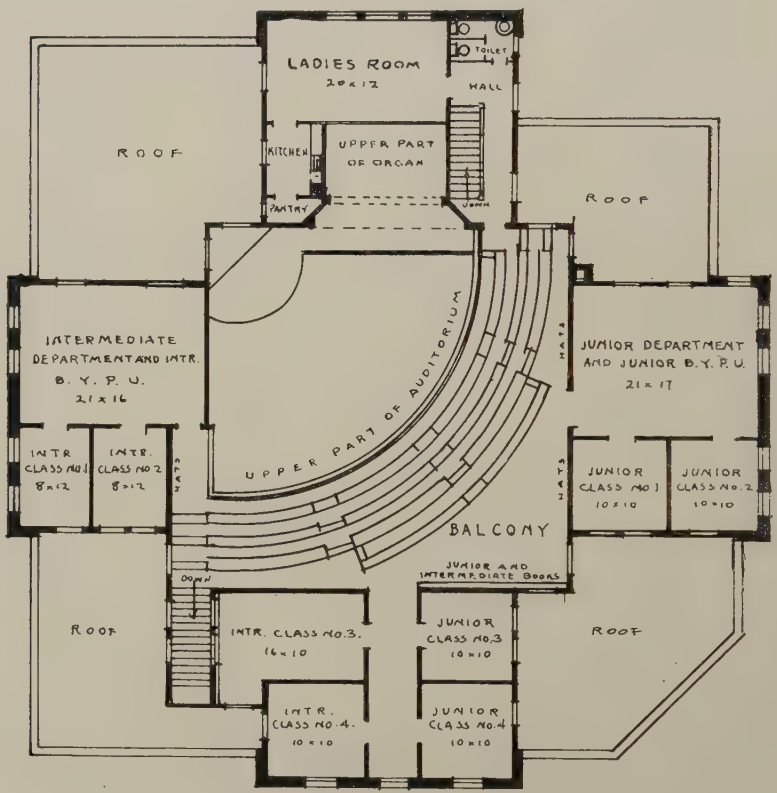
PLAN XVIII.—FIRST FLOOR.

Plan XVIII is especially marked by its expanding auditorium. This possibility of almost indefinite expansion of seating capacity is a pleasing feature in any building. The general auditorium seats two hundred and thirty-five. With three rooms adjoining and the balcony the total capacity in sight and hearing of the speaker's platform is 750.

All of the six departments of the Sunday school are provided with separate department rooms, and at the same time arrangement is usually made to subdivide these rooms for class work, thus avoiding duplication of space.

Large space is assigned to the Senior department on the assumption that this department will include all the young people of the school and may thus be of large proportions.

This plan is not a mere theory. It is rather an evolution, being the result of testing and experience.



PLAN XVIII.—SECOND FLOOR

The outside dimensions of the building as here presented are 85x88 feet, two-story. The center of the auditorium portion extends up above the roofs of the wings, affording direct light and ventilation from above.

The exterior perspective is similar to that shown for Plan XXIV.

XIX

PLANS FOR SUNDAY SCHOOLS NUMBERING 300 TO 500

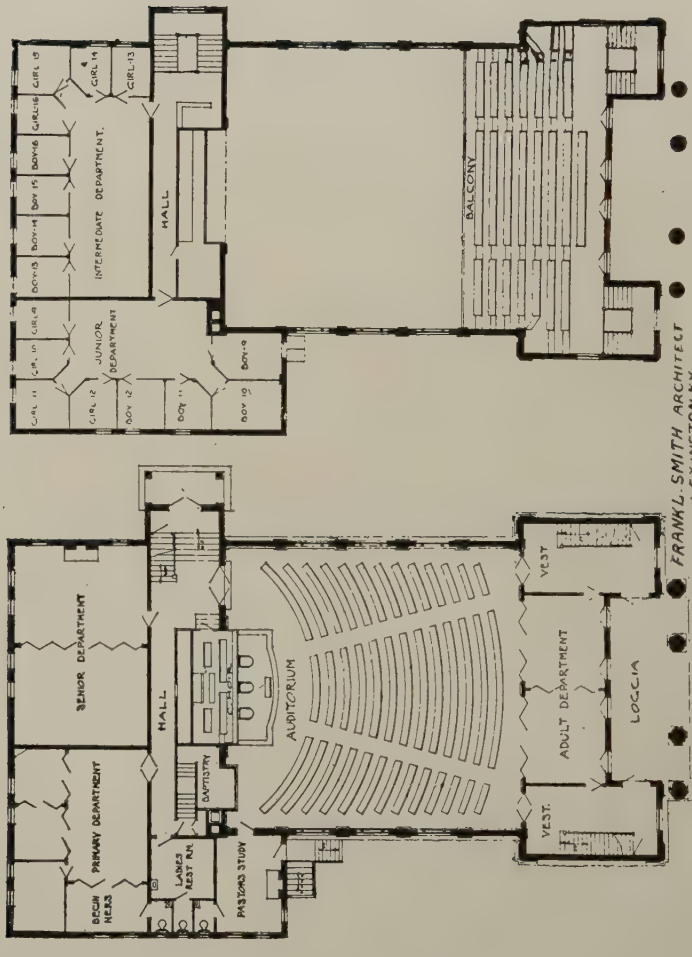
In the type of buildings which we come now to consider, the architect has larger freedom and an endless variety of developments may be expected, both as regards floor plans and types of architecture.

It is needful to remind the reader of suggestions made at the close of Chapter XVI, relative to the newer type of organization which provides seven departments instead of six as has been the custom for some years. Plan XXI illustrates the new type organization which has been adopted by many of the denominations; introducing the Young People's department and assigning only three years each to the Junior and Intermediate departments.

Of the six plans presented in this Chapter, all are unified buildings except Plans XIX and XXI, which offer auditoriums separate from Sunday-school accommodations.

There is, of course, little difficulty involved in the designing of these buildings where there is no necessity for economy and no special limit as regards lot room. We seek especially to present acceptable buildings which provide large space at the lowest cost, and such buildings as are suitable for various types of lots, such as the long narrow lot (XIX), the inside lot (XX), and the square lot (XXII and XXIV).

As a measure of economy the largest use may be made of the ground floor, provided this floor is skillfully treated so as to minimize the difficulties which it involves. Especial attention is directed in this connection to Plans XX, XXIII and XXIV. In these plans the ground floors are marked (1) by an absence of posts and other reminders that the floor is under an auditorium; (2) excellent light and ventilation, secured in part by the type of front approaches to the building; (3) complete utilization of all available space.



PLAN XIX.—FIRST FLOOR PLAN XIX.—SECOND FLOOR

THE PARK AVENUE METHODIST EPISCOPAL CHURCH, SOUTH, LEXINGTON, KY.

—*Frank L. Smith, Architect.*

THE PARK AVENUE METHODIST EPISCOPAL CHURCH, SOUTH, LEXINGTON, KY. (PLAN XIX.)

The Park Avenue Methodist Episcopal Church, South, in Lexington, Kentucky (Plan XIX), offers good suggestions. The arrangement of the inviting loggia, the vestibules, and the Adult Department with balcony over is admirable, affording enlargement of the auditorium for special occasions.

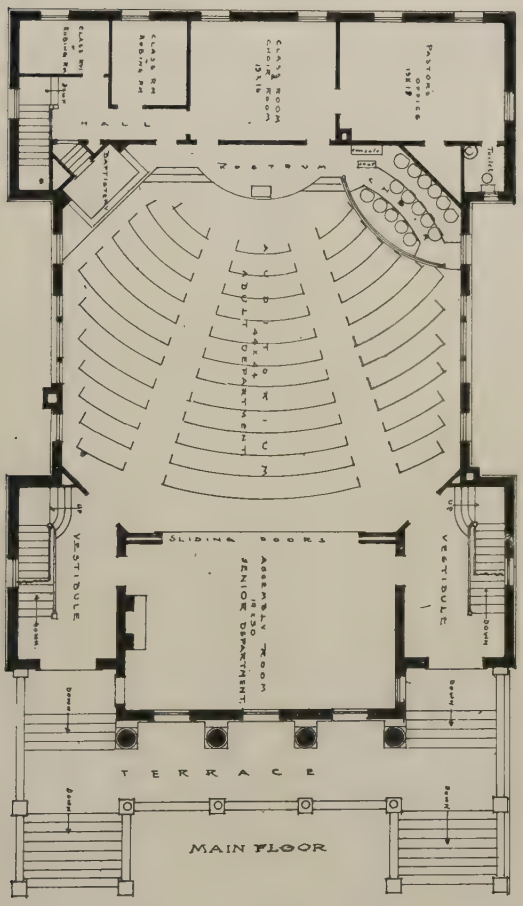
The large Senior Department room offers a secondary auditorium separately heated, suitable for small week-day gatherings.

Athletics and social life are provided for on the basement floor not shown in the drawings.

—*C. W. Bulger & Son, Architects.*

FIRST BAPTIST CHURCH, FORNEY, TEXAS. (PLAN XX.)

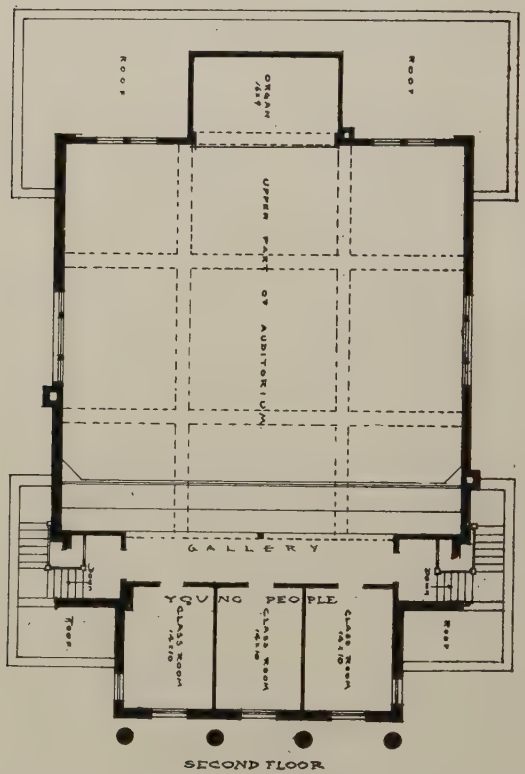
An interesting and successful effort to provide at low cost for a rather large Sunday school. This building has been recently duplicated at Coolidge, Tex., and at Nevada, Tex.



—C. W. Bulger & Son, Architects.

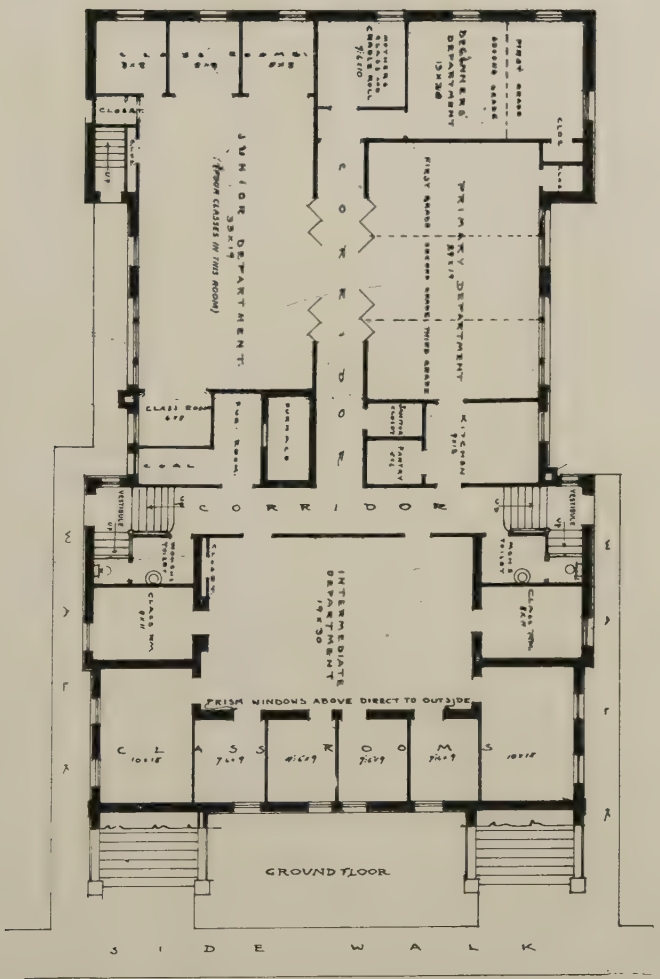
PLAN XX. FIRST BAPTIST CHURCH, FORNEY, TEX. FIRST FLOOR

The main auditorium seats 260; total capacity including adjoining assembly room and balcony, 400. The plan represents an effort to provide at low cost extended provisions for church and Sunday-school work. This building was erected (1918) at a cost of $22,000.



PLAN XX. FIRST BAPTIST CHURCH, FORNEY, TEX. SECOND FLOOR

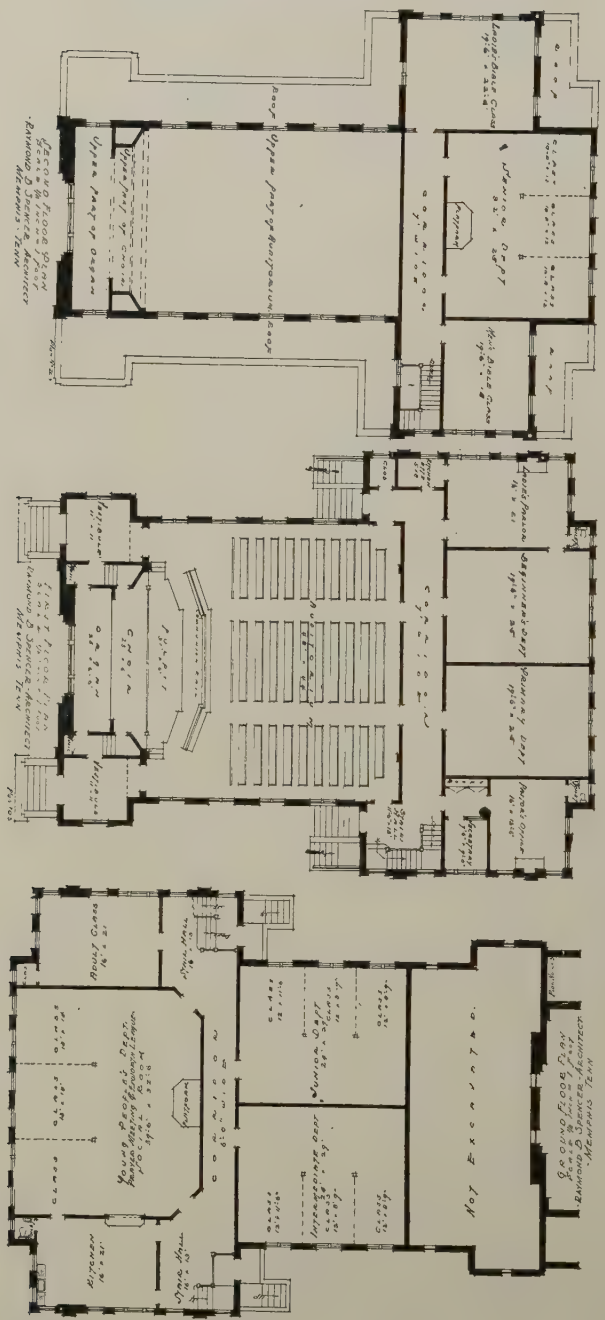
Back of the gallery, three rooms are provided for organized classes. These might well be separated from each other by movable partitions, thus offering a large parlor.



PLAN XX. FIRST BAPTIST CHURCH, FORNEY, TEX. GROUND FLOOR

This floor constitutes the special feature of the building. No posts are in evidence, thus measurably removing a usual objection to the ground floor.

The Primary and Junior Departments when thrown together constitute an admirable social or banquet room, while the Intermediate Department is available for smaller occasions. Note that the Intermediate Department is lighted through prism windows over class rooms direct to the outside.

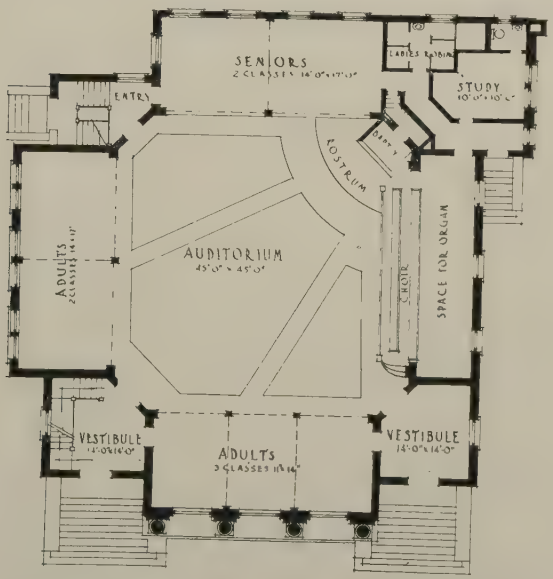


PLAN XXI. PRELIMINARY SKETCH FOR METHODIST CHURCH.

Courtesy of Rev. J. A. Baylor, Architectural Secretary, Board of Church Extension, Louisville, Ky.

—*R. H. Hunt, Architect.*

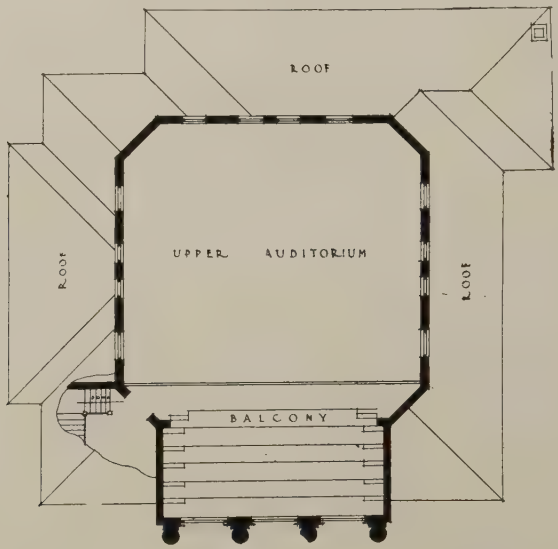
PLAN XXII. FIRST BAPTIST CHURCH, ATKINS, ARK.



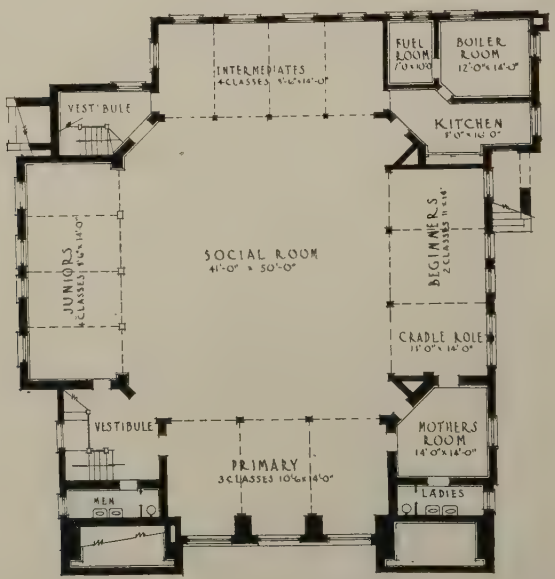
PLAN XXII. FIRST FLOOR, FIRST BAPTIST CHURCH, ATKINS, ARK.

The First Baptist Church, Atkins, Ark., offers a total possible seating capacity of 500, with Sunday-school provisions for 350 to

500. As an effort to provide for a large church and Sunday school at comparatively low cost, the building offers admirable suggestions.



PLAN XXII. SECOND FLOOR, FIRST BAPTIST CHURCH, ATKINS, ARK.



PLAN XXII. GROUND FLOOR, FIRST BAPTIST CHURCH, ATKINS, ARK.

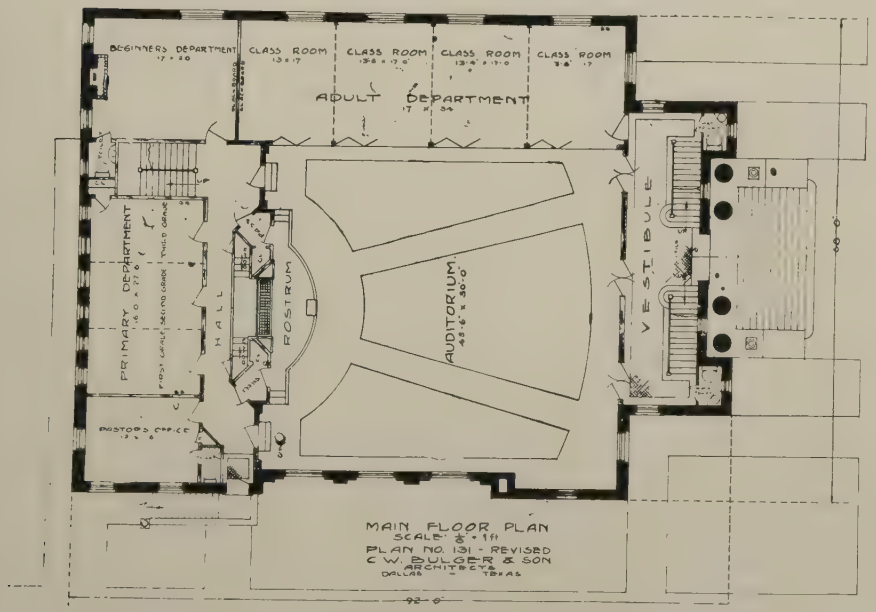
The demands of the modern Sunday school for extended space adapted to its educational work places exactions upon the church building and creates special difficulties for the designing architect.

Given sufficient ground space and an unlimited exchequer, it can not be especially difficult to devise suitable arrangements to meet Sunday-school needs. The real problem is to provide within limited space and on an economical basis the extended provisions required.

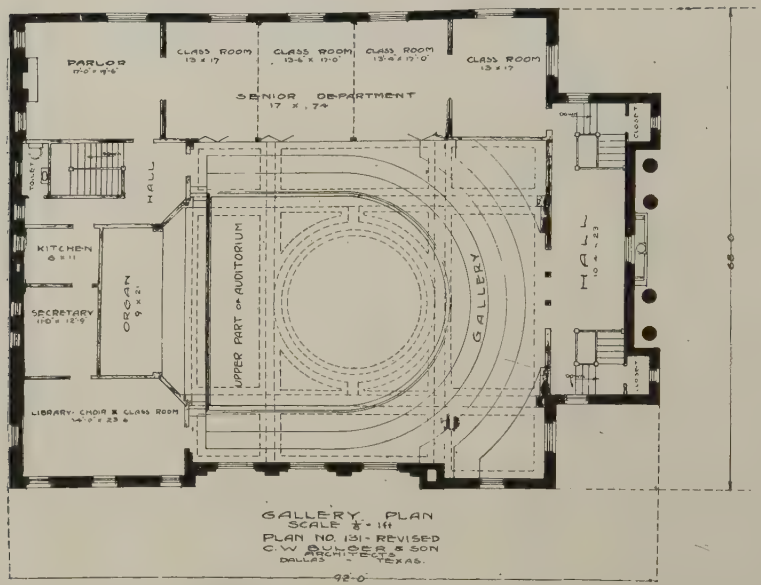
Plan XXIII, along with many other plans in these pages, is offered especially because large and varied accommodations are secured at reasonable cost.

The arrangement of class rooms on one side of the auditorium is an interesting feature in this building. Observe that all space on the ground floor is utilized.

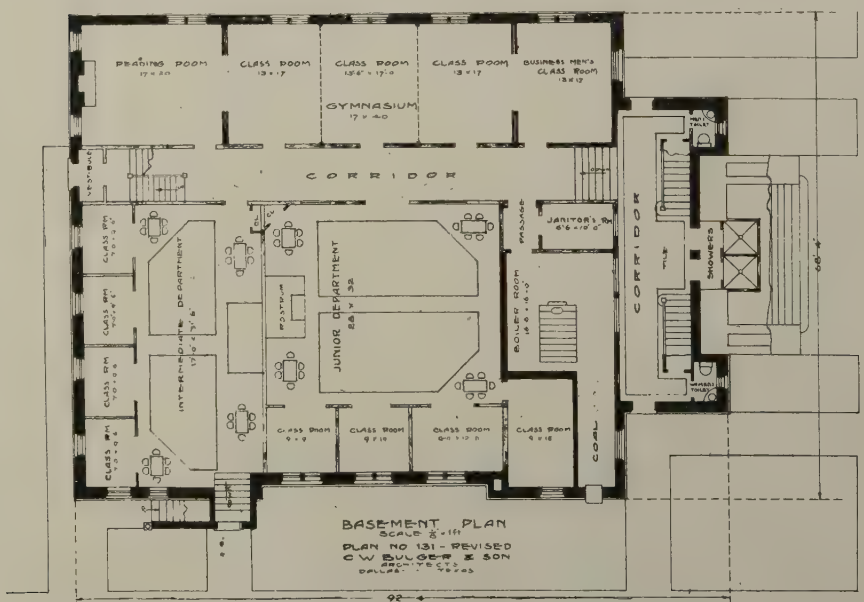
Complete provision is made for all phases of church activity, as outlined in Chapter I.



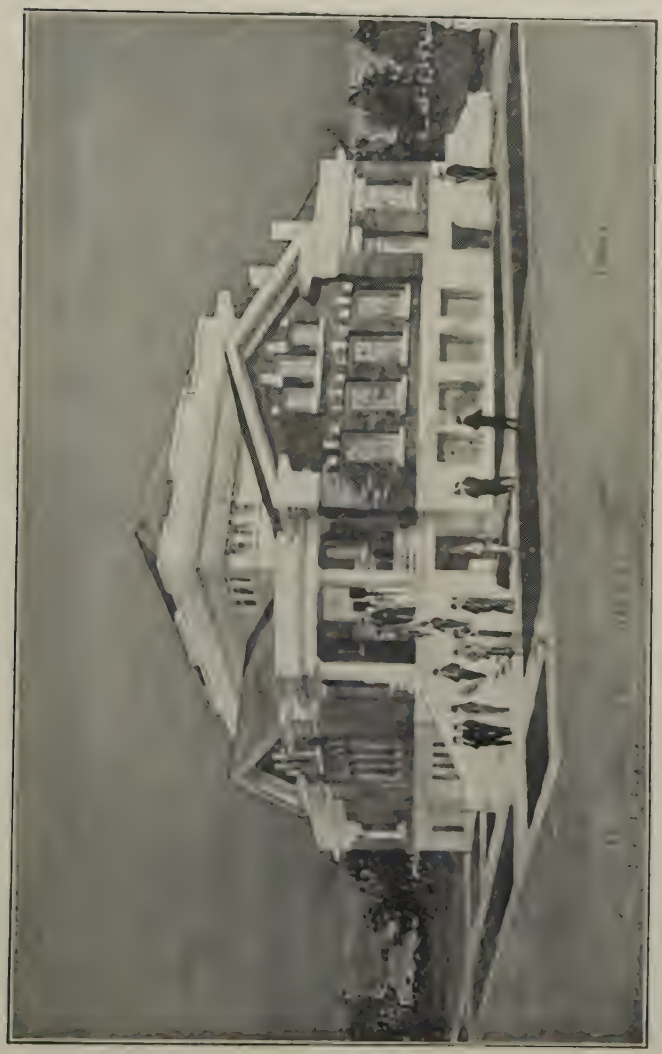
PLAN XXIII. FIRST FLOOR, THE BAPTIST CHURCH, LIVINGSTON, TEX.



PLAN XXIII. SECOND FLOOR, THE BAPTIST CHURCH, LIVINGSTON, TEX.

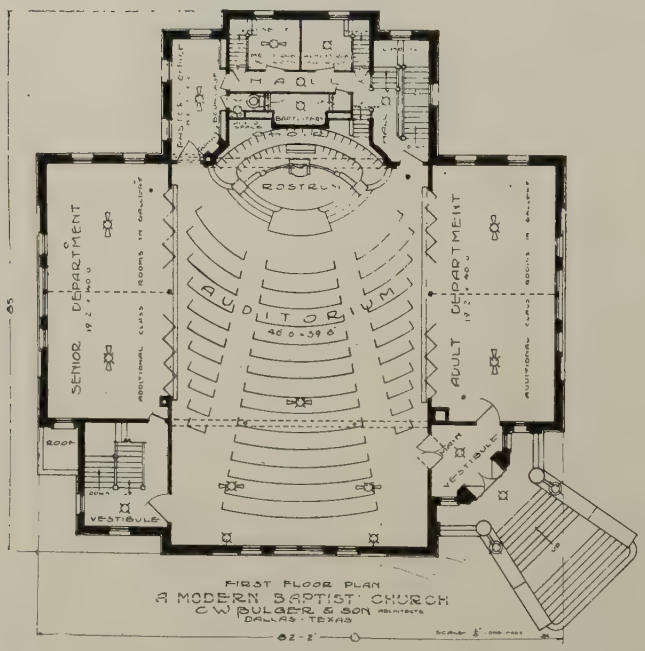


PLAN XXIII. GROUND FLOOR, THE BAPTIST CHURCH, LIVINGSTON, TEX.
Note absence of posts and complete utilizing of all space.



PLAN XXIV. EXTERIOR PERSPECTIVE. APPLICABLE ALSO TO PLAN XVIII

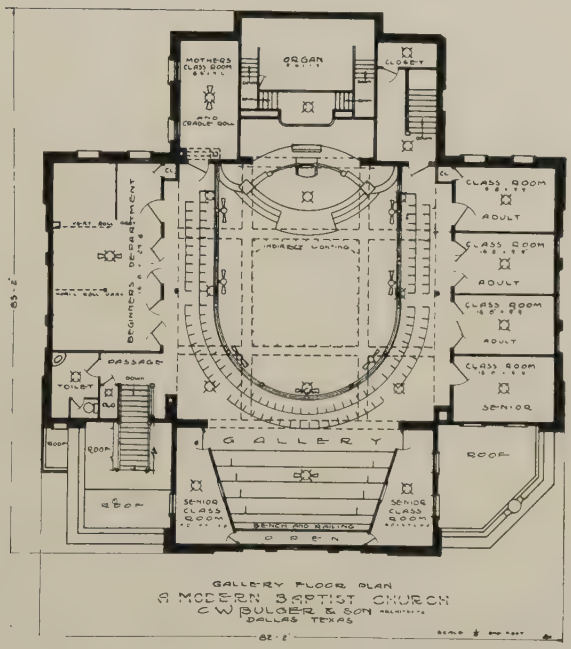
—*C. W. Bulger & Son, Architect.*



PLAN XXIV. MAIN FLOOR. THE BAPTIST CHURCH, CALDWELL, TEX.

In Plan XXIV we have extended Sunday-school provisions at comparatively low cost. In unified buildings of this type which group Sunday-school accommodations around the auditorium, it is of course possible to secure exceptional provisions at low cost, though sacrifice must be made in other ways.

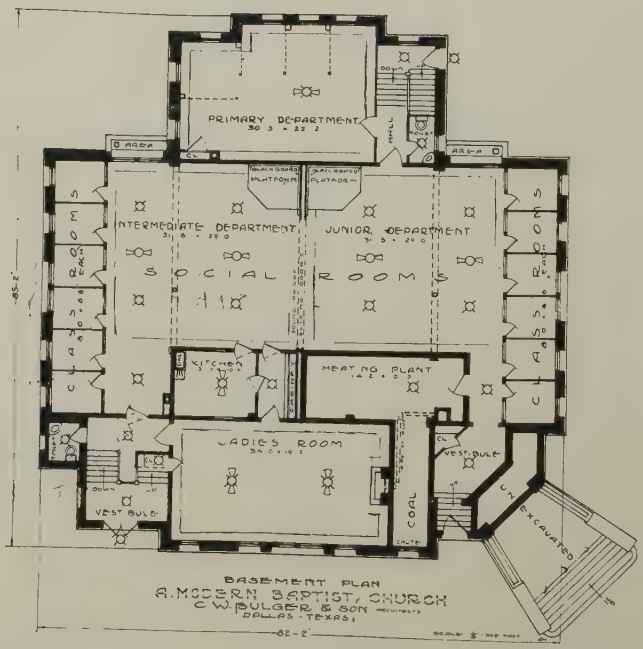
The outside dimensions are 82 feet and 2 inches by 85 feet and 2 inches, two story and basement. The center portion of the auditorium extends up above the roofs of the wings, affording direct light and ventilation from above.



PLAN XXIV. SECOND FLOOR. THE BAPTIST CHURCH, CALDWELL, TEX.

The building is especially marked: (1) by its expanding auditorium; capacity of main auditorium 370; total capacity, including adjoining rooms and balcony, 750; note elevated baptistry back of and above the choir; chorus choir (36) and secondary platform; (2) by the utilizing of all space on the ground floor.

Location of electric lights and fans is indicated throughout by appropriate signs.



PLAN XXIV. GROUND FLOOR. THE BAPTIST CHURCH, CALDWELL, TEX.

Observe absence of posts and note how compact and complete are the provisions on this floor.

XX

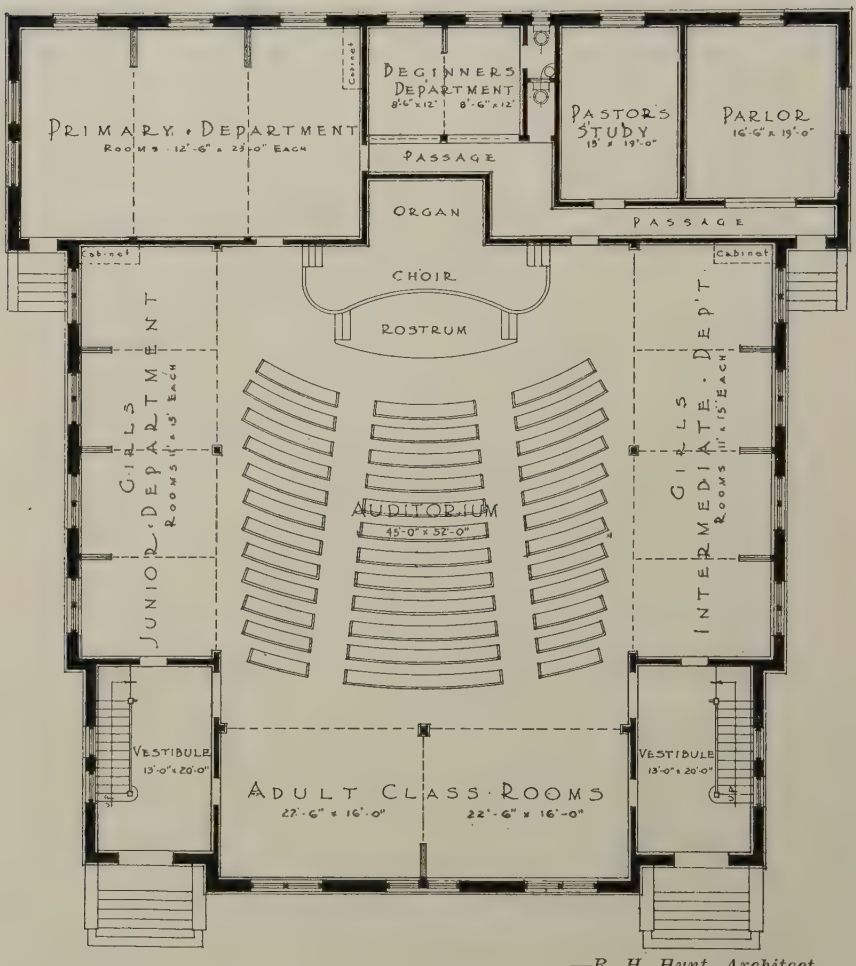
PLANS FOR SUNDAY SCHOOLS NUMBERING 500 TO 800

In this chapter we offer eight plans which have especially commended themselves. Some have been selected because they offer exceptionally complete provisions at low cost; some because of certain commendable ideas which they embody; some because of the ideal accommodations which they offer throughout.

Observe that in this chapter, as in former chapters, we present buildings adapted to different types of lots, as follows: the square lot (XXV), the long narrow lot (XXVI), the inside lot (pages 152 and 153), the converging lot (XXXI).

—R. H. Hunt, Architect.

PLAN XXV. EXTERIOR PERSPECTIVE. A BUILDING WHICH OFFERS LARGE RESULTS AT LOW COST

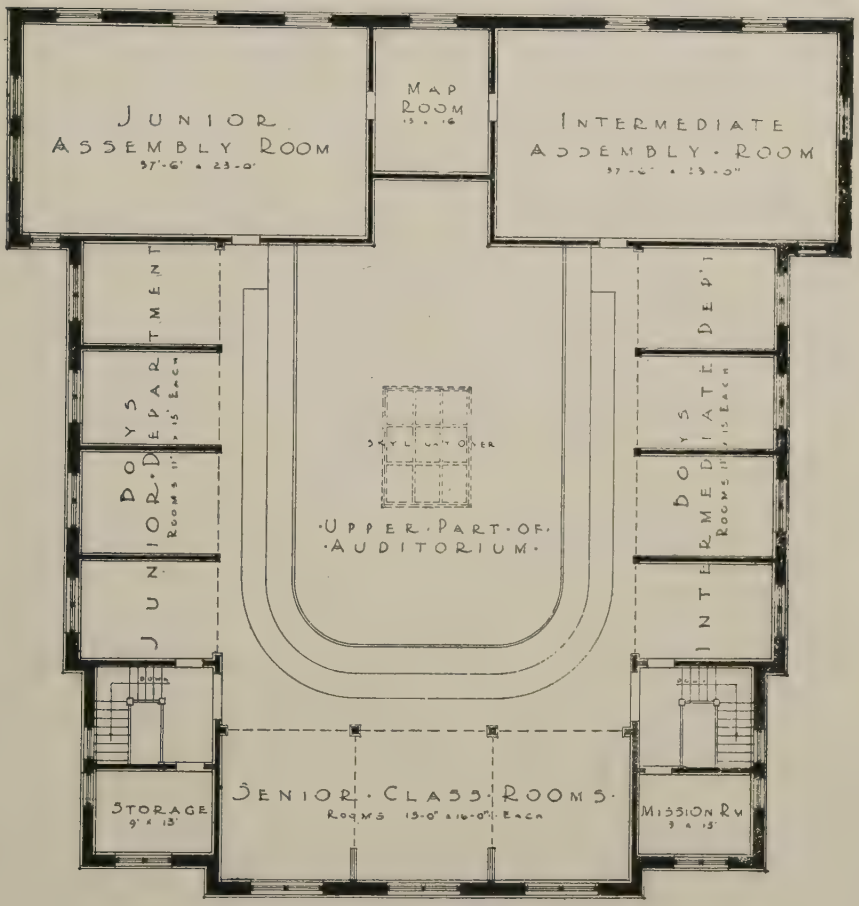


—R. H. Hunt, Architect.

PLAN XXV.—FIRST FLOOR

In Plan XXV we have an excellent development of the building which groups the educational work about the auditorium.

The large Junior and Intermediate assembly rooms, with map and mission room between, and the eight class rooms for each of these departments will be pleasing to workers in these departments. The map room may also be fitted as a kitchen, and the Junior and Inter-



PLAN XXV.—SECOND FLOOR

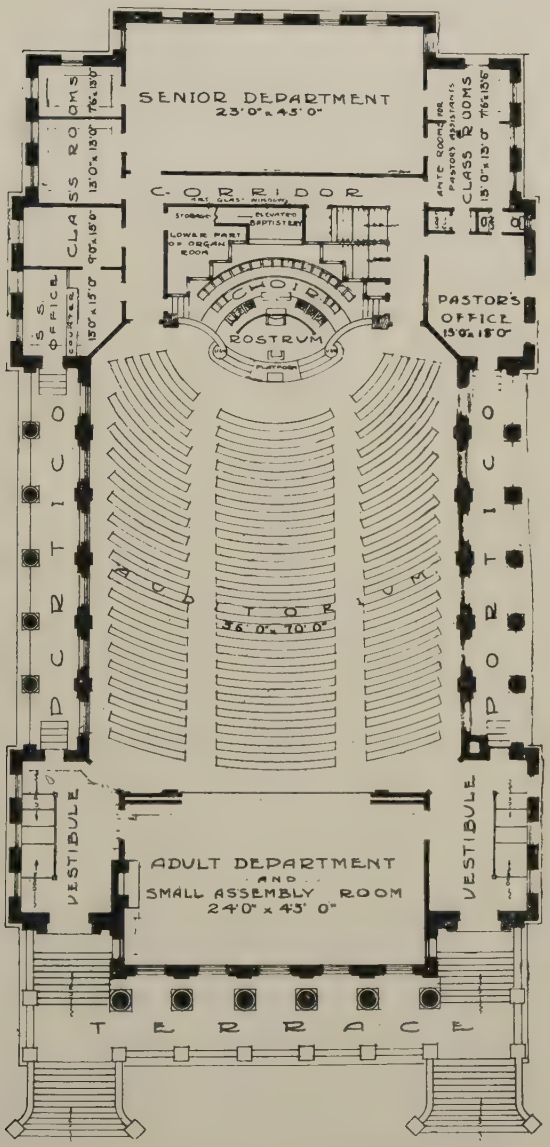
mediate assembly rooms will constitute effective rooms for social life, banquets, and all types of serving, though the architect designed that the basement floor, not shown here, should be fitted for these ends. For exterior perspective see next page.

This floor plan was used substantially by the First Baptist Church, Mineral Wells, Tex., in the planning of its present building. It has been used in its essential features by other churches.

—*C. W. Bulger & Son, Architects.*

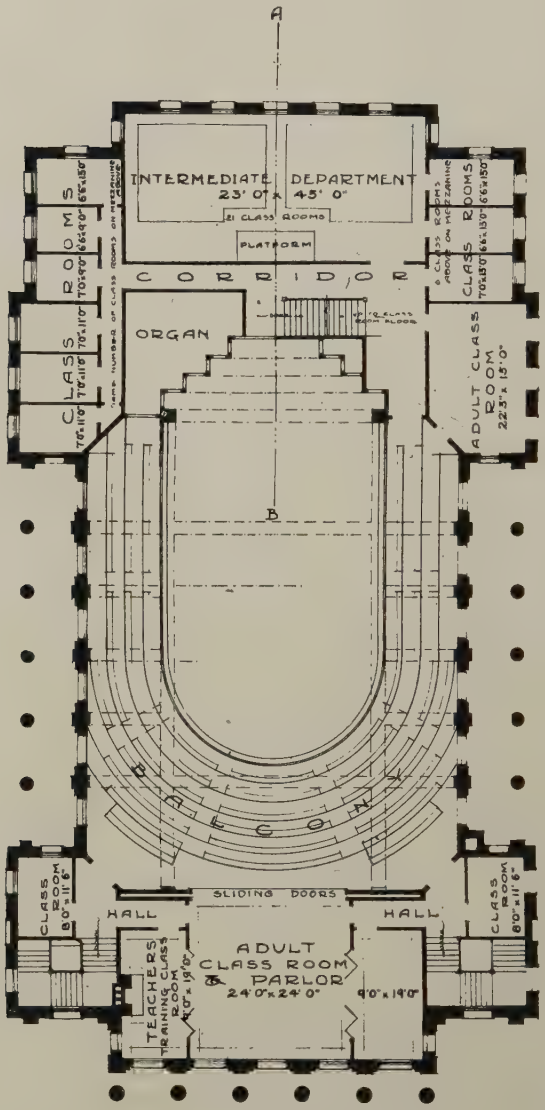
THE PROPOSED FIRST BAPTIST CHURCH, MARSHALL, TEX. PLAN XXVI

Modified classic building, offering three floors. The lot comprises a full block and the building is to stand in a grove of beautiful trees.



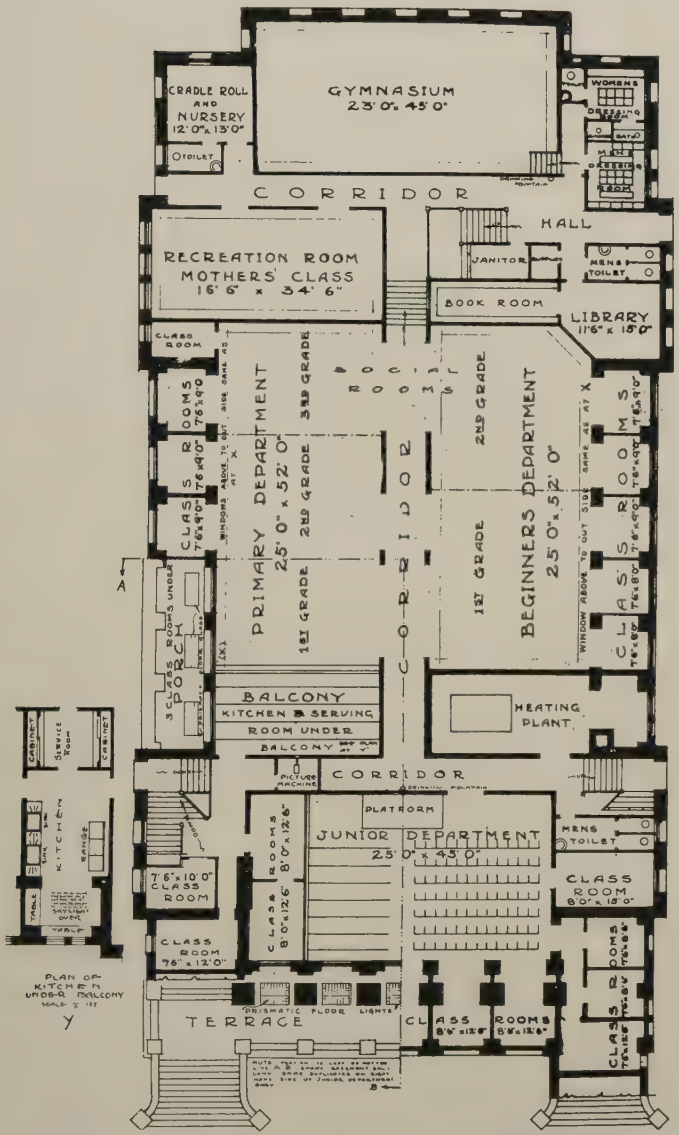
PLAN XXVI. FIRST FLOOR. THE FIRST BAPTIST CHURCH, MARSHALL, TEX.

Offers some unusual and especially interesting features. Auditorium proper seats 560, not taking account of the balcony and the assembly room adjoining.



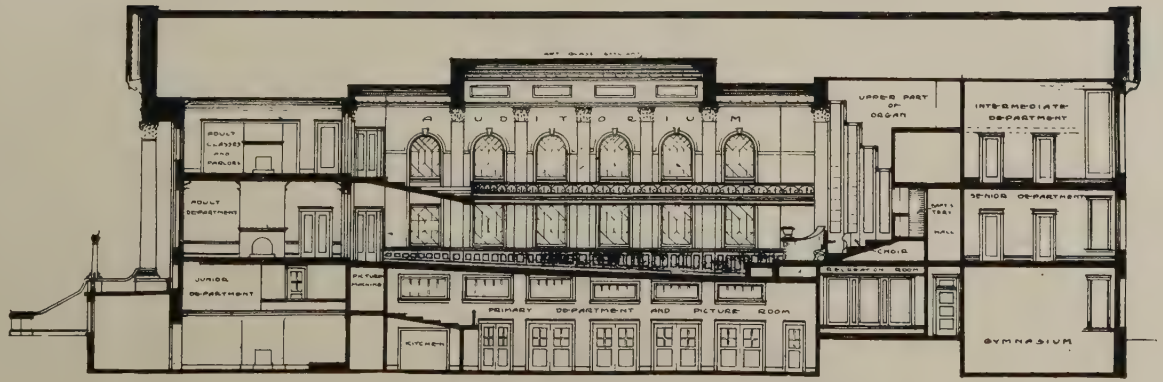
PLAN XXVI.—SECOND FLOOR

The mezzanine arrangement on this floor is interesting. Class rooms on left side of line "A B" are on a mezzanine floor, and these six rooms are duplicated on the right side. Class rooms on the right side of line "A B" are on the balcony floor and these are duplicated on the left side.



PLAN XXVI.—GROUND FLOOR

Portion to left of dotted line "A B" shows basement balcony. The same is duplicated on the right side, and this balcony floor constitutes the Junior Department.

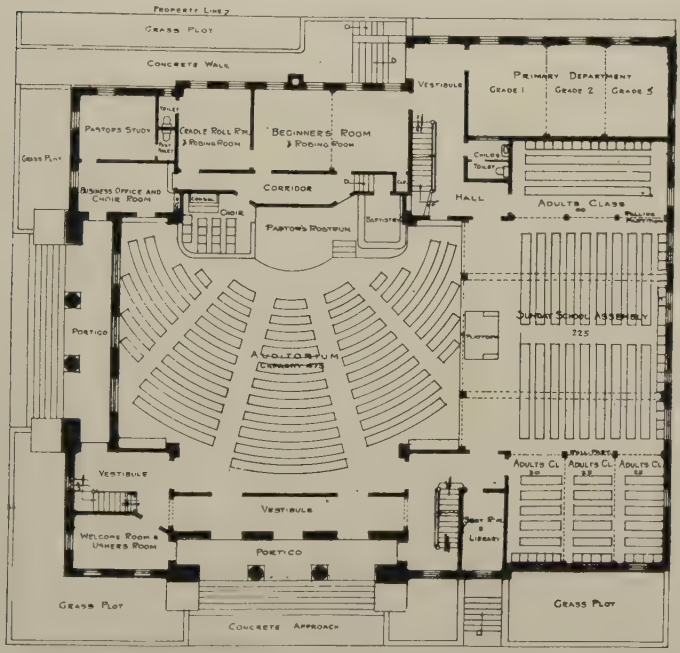


PLAN XXVI. LONGITUDINAL SECTIONAL

A study of this longitudinal section will shed light on the drawings presented on the preceding pages.

—H. L. Cain, Architect.

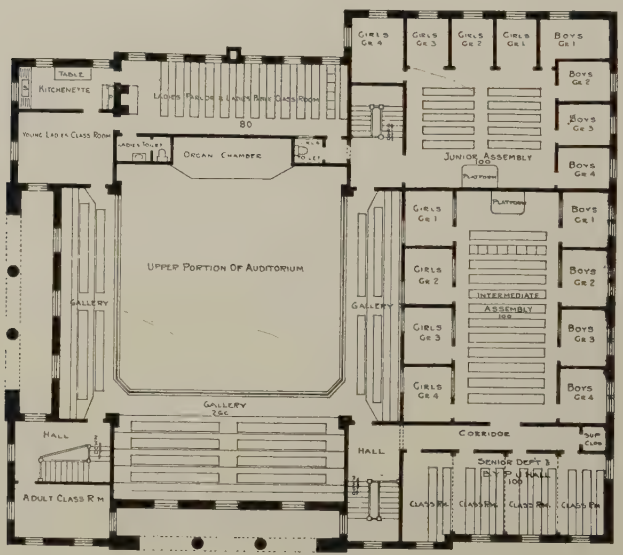
PLAN XXVII. THE FIRST BAPTIST CHURCH, NEW BERN, N.C.



THE FIRST BAPTIST CHURCH, NEW BERN, N.C. FIRST FLOOR PLAN

The First Baptist Church, New Bern, N.C., is an exceptionally compact and complete building. It offers for the preaching services seating as follows: Main auditorium, 475; Sunday-school assembly, 225; galleries, 260; total in sight and hearing of the speaker's platform, 960.

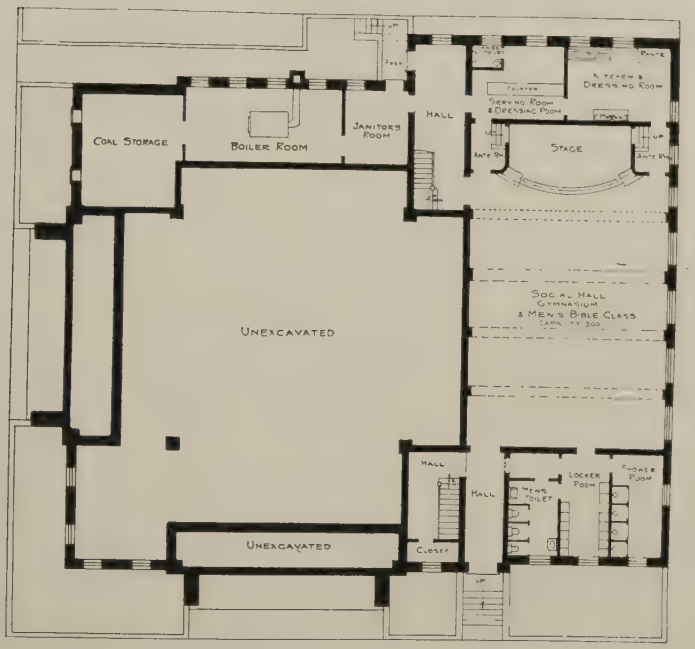
Provision is offered for a possible Sunday-school attendance of 1,000. With kitchen on basement floor and kitchenette on second floor, ample accommodations are offered for social life.



—H. L. Cain, Architect.

THE FIRST BAPTIST CHURCH, NEW BERN, N.C. SECOND FLOOR PLAN

Observe the completeness of departmental provisions, and note that all department rooms are separated from each other by corridors or solid sound-proof partitions.



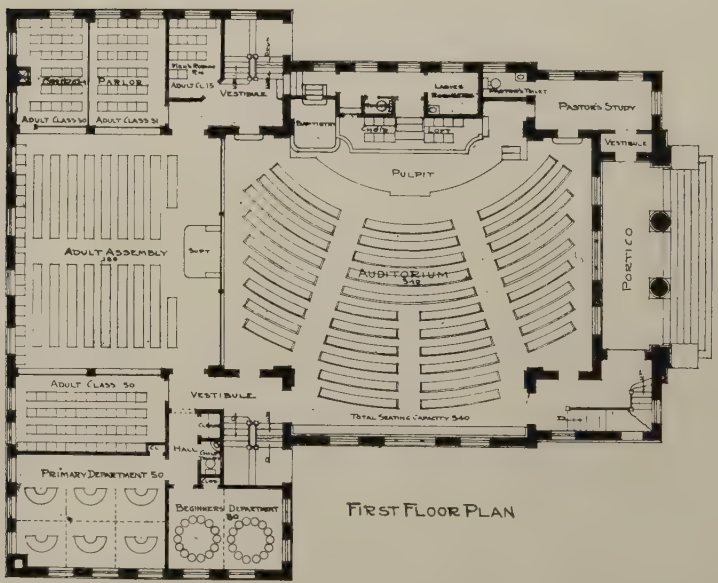
THE FIRST BAPTIST CHURCH, NEW BERN, N.C. GROUND FLOOR PLAN

No Sunday-school evidences are to be found on this floor. Note the fine combination of (1) Social hall, (2) Assembly hall for lectures and musicals, (3) Gymnasium.

FRONT ELEVATION

—H. L. Cain, Architect.

THE FIRST CHRISTIAN CHURCH, GRAHAM, VA.

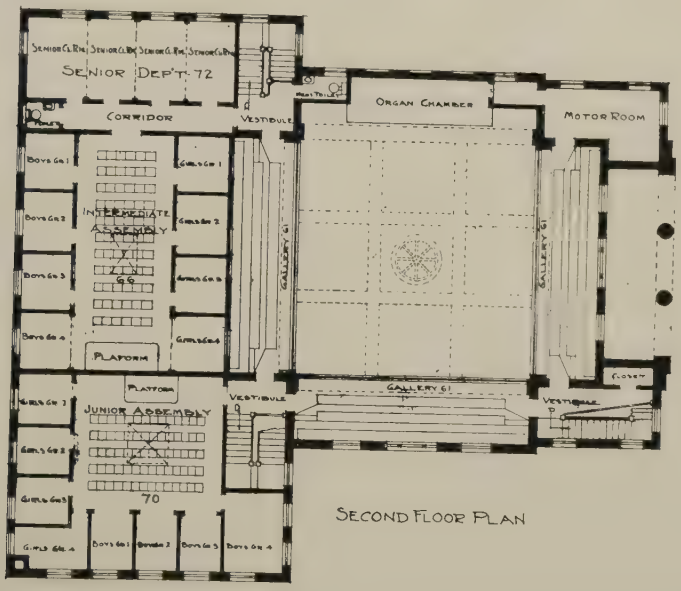


THE FIRST CHRISTIAN CHURCH, GRAHAM, VA. FIRST FLOOR

The First Christian Church, Graham, Va., shows a modification of the preceding plan. The estimated cost of this building is $50,000, while the New Bern Church is estimated to cost $75,000.

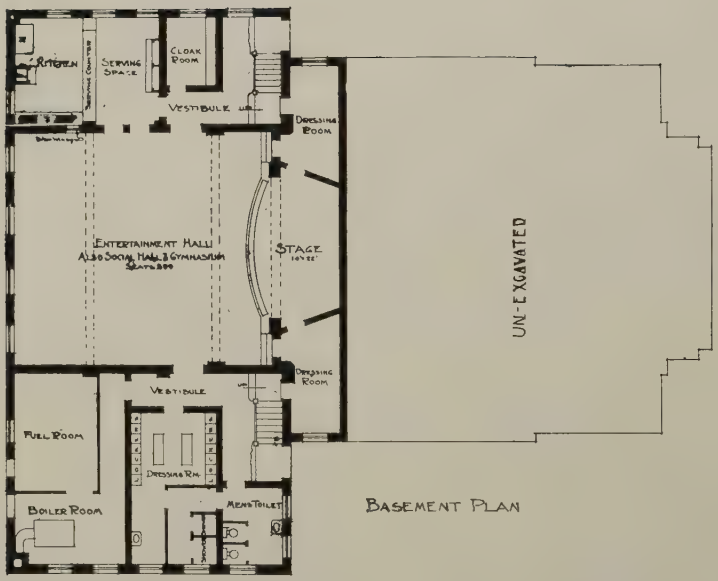
The main auditorium seats	340
The Adult Assembly seats	160
The balconies seat	183
Total seating capacity	683
Normal Sunday-school capacity	450
Possible Sunday-school capacity	850

For completeness, compactness, convenience and economy, this plan and the larger plan which precedes offer admirable suggestions.



—*H. L. Cain, Architect.*

THE FIRST CHRISTIAN CHURCH, GRAHAM, VA. SECOND FLOOR.



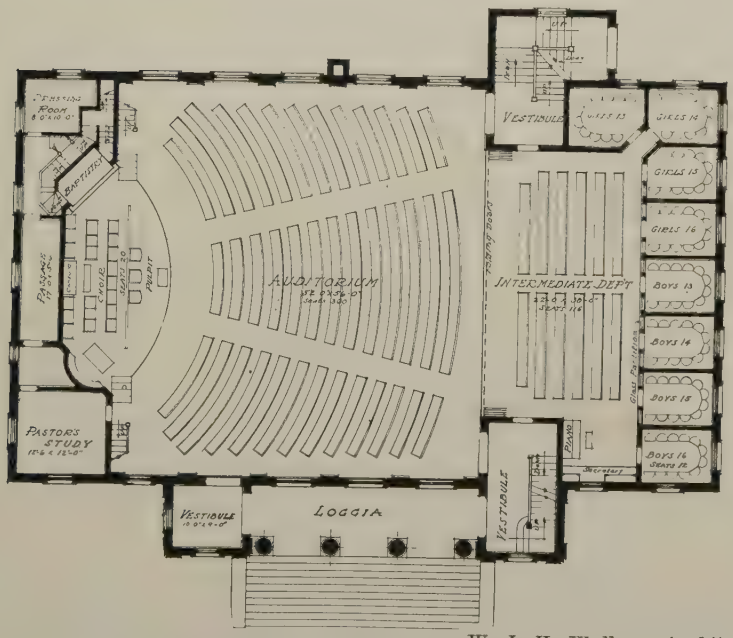
THE FIRST CHRISTIAN CHURCH, GRAHAM, VA. GROUND FLOOR.

Plan XXVIII. The proposed First Baptist Church, Bartlesville, Okla., is unique in that at the lowest possible cost provisions are made for a large Sunday school and for a large congregation.

Main auditorium seats	360
Intermediate Department seats	116
Junior Department seats	116
Side balconies seat	162
Total seating capacity	754

The possible capacity of the Sunday school is as follows:

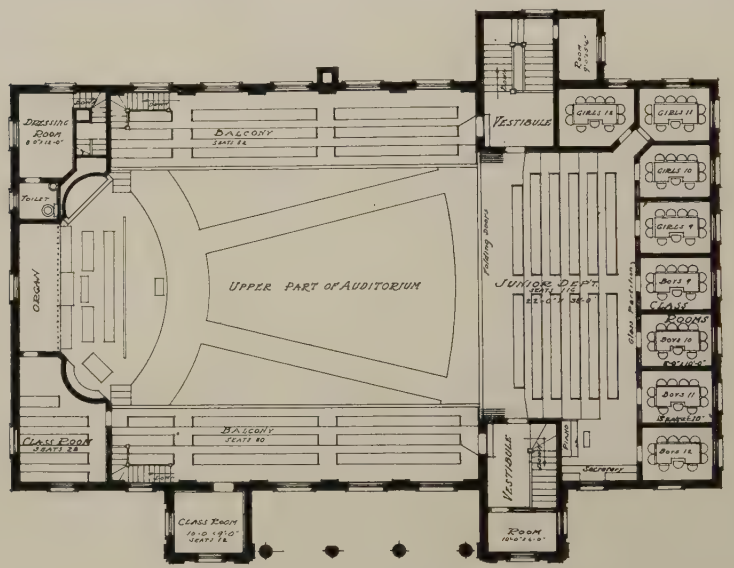
Mothers' Room and Beginners	60
Primary Department	63
Junior Department	116
Intermediate Department	116
Senior and Adult Departments	345
Total Sunday-school capacity	700



—*W. J. H. Wallace, Architect.*

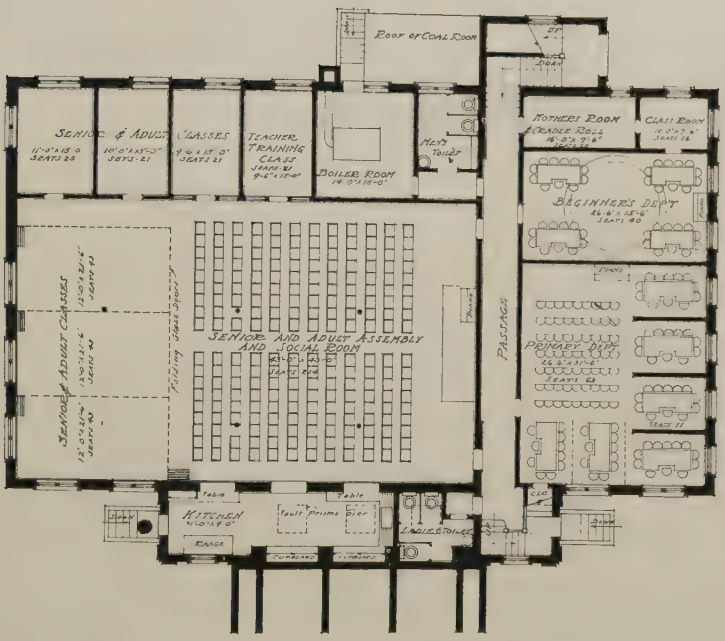
PLAN XXVIII. PRELIMINARY SKETCH FOR FIRST BAPTIST CHURCH, BARTLESVILLE, OKLA. FIRST FLOOR

The Junior Department comprises rising tiers so that the space may be used as a balcony supplementing the auditorium capacity. All manner of banquets and various types of social life may be cared for on the ground floor. The architect, whose home is in Bartlesville, Okla., estimates that in his section, under present conditions (1920) this building would cost $50,000 to $80,000. The cost might be reduced by omission of side balconies and building on smaller scale. The front of this building might be at either end instead of the side. (For building with entrance to front of auditorium, see Plan XXI.)



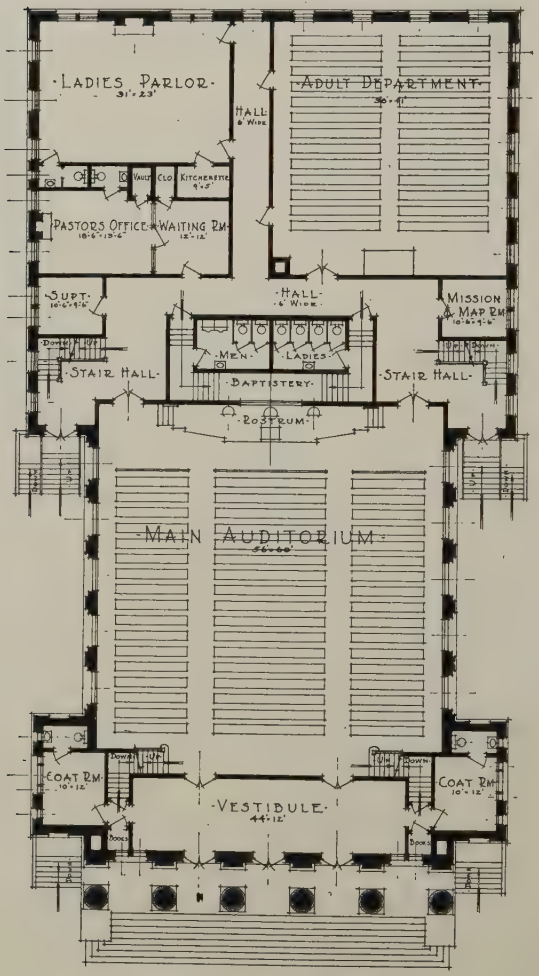
—*W. J. H. Wallace, Architect.*

PLAN XXVIII. PRELIMINARY SKETCH FOR FIRST BAPTIST CHURCH, BARTLESVILLE, OKLA. SECOND FLOOR.



—*W. J. H. Wallace, Architect.*

PLAN XXVIII. PRELIMINARY SKETCH FOR FIRST BAPTIST CHURCH, BARTLESVILLE, OKLA. GROUND FLOOR

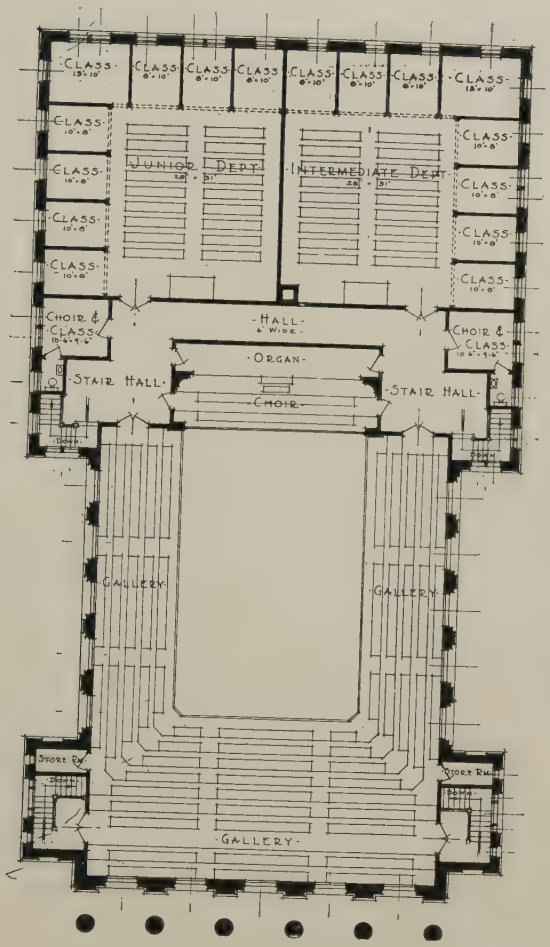


MAIN FLOOR PLAN.

—Raymond B. Spencer, Architect.

PLAN XXIX.—FIRST FLOOR

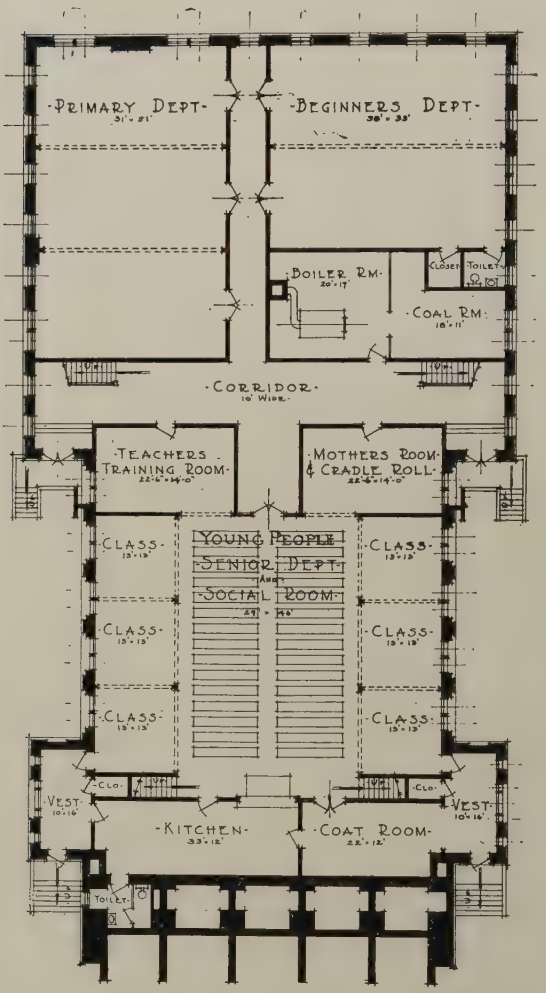
Plan XXIX offers some suggestive features. Among these on the first floor, we may mention (1) coat room with toilets adjoining vestibule; (2) balcony stairs ascending from the auditorium instead of the vestibule as is usual; (3) a suite of administrative offices for the pastor and other workers, easily accessible; (4) a good secondary auditorium (marked Adult Department) for week-day meetings.



PLAN XXIX.—SECOND FLOOR

For churches which are able to provide a building offering an auditorium which shows no Sunday-school evidences this plan possesses special merit.

The architect proposes a level floor and straight pews throughout, after the custom in England. Provisions for Juniors and Intermediates are ideal; clear story windows over class rooms light assembly rooms. Observe with what ease the whole school may assemble for general exercises in the main auditorium.



PLAN XXIX.—GROUND FLOOR

The special feature here is the easy access; (1) four stairways lead down from above; (2) four outside entrances are provided, two on each side of the building.

We have here an illustration of excellent arrangement where the main outside steps extend across the front of the building.

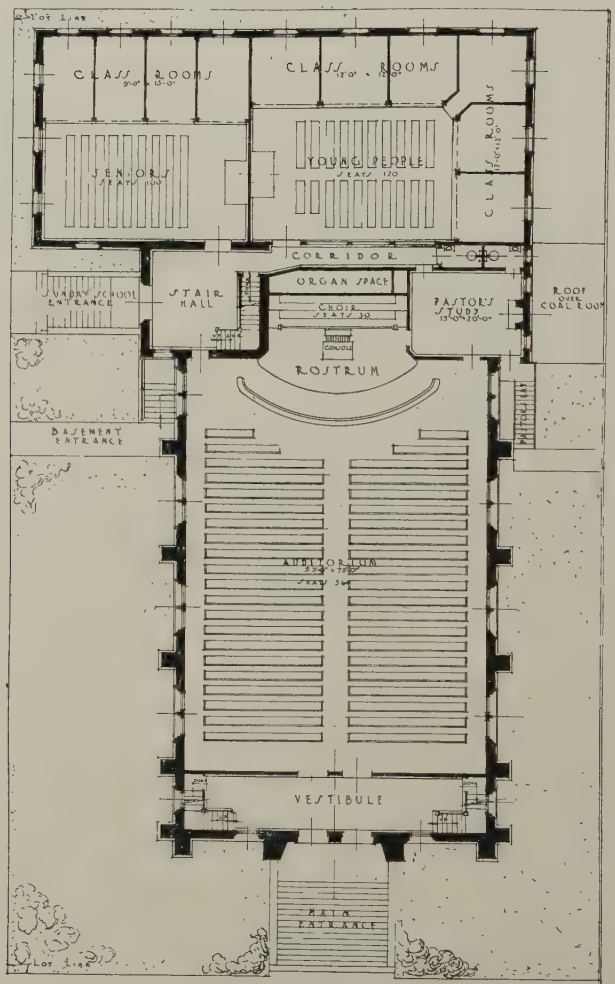
—*R. H. Hunt, Architect.*

PLAN XXX. PRELIMINARY SKETCH FOR THE EIGHTEENTH STREET METHODIST EPISCOPAL CHURCH, SOUTH, WACO, TEX.

This represents an effort to house a large church and Sunday school with an exterior which will be at once churchly and striking.

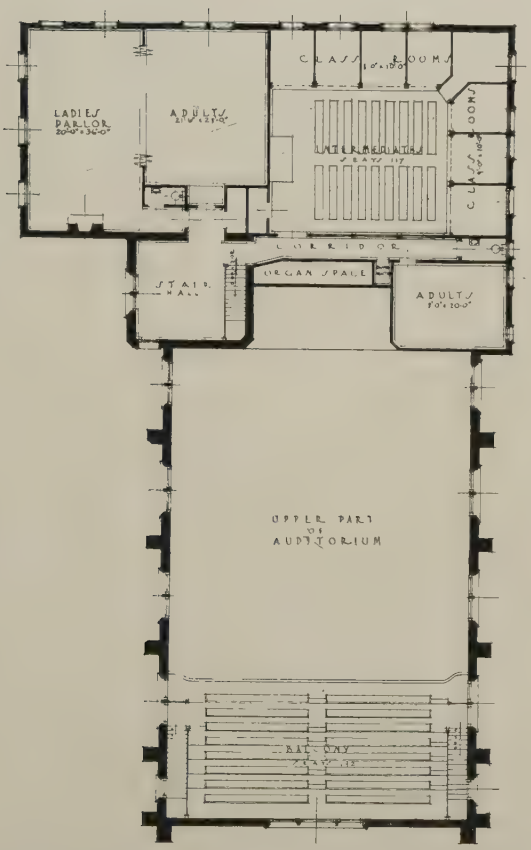
The auditorium seats 656, while the ground floor and the three stories at the rear will accommodate a Sunday school of 700 to 1,200 members.

The departmental arrangement follows the suggestions of the Board of Sunday Schools of the Methodist Episcopal Church, South.

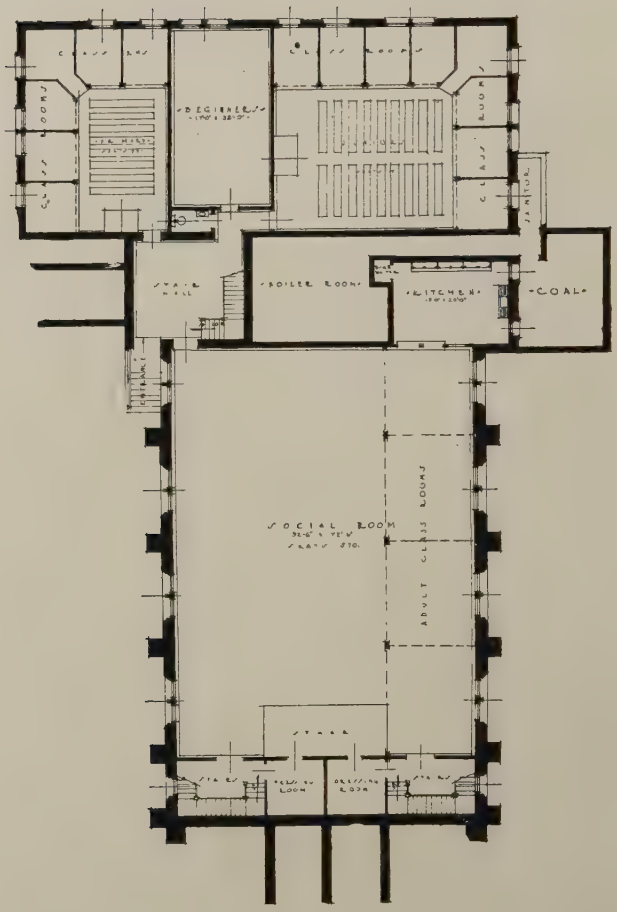


—*R. H. Hunt, Architect.*

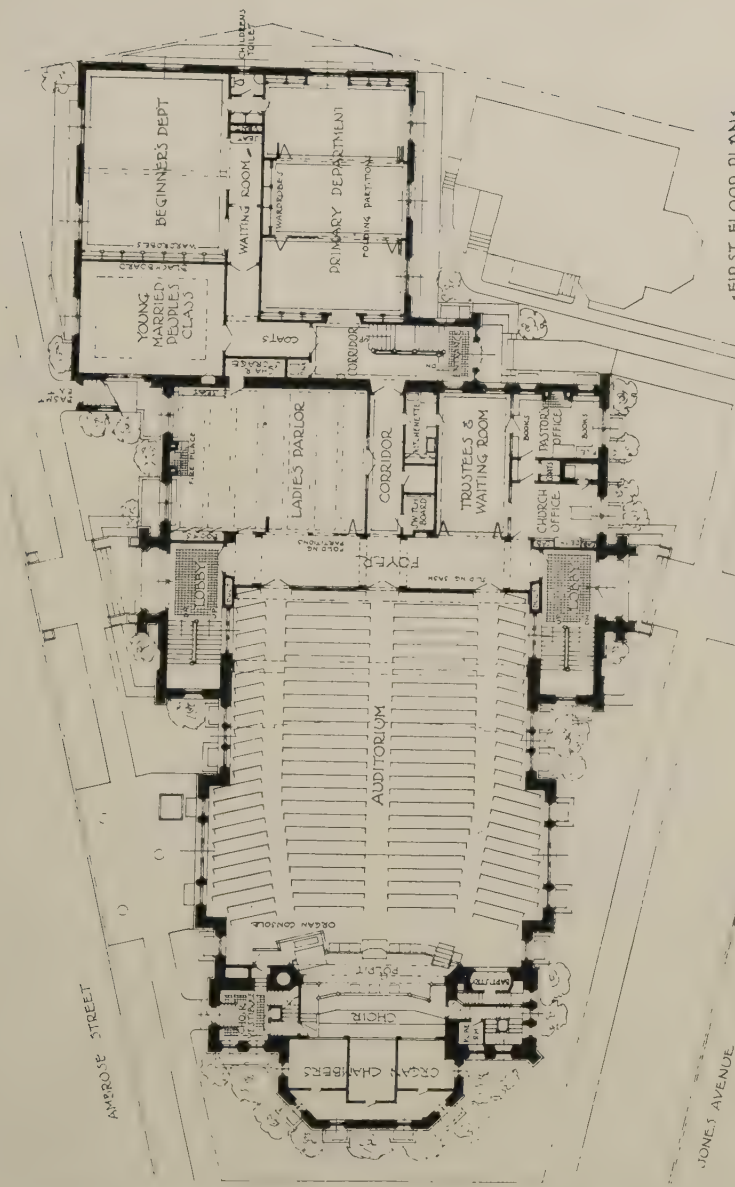
PLAN XXX. FIRST FLOOR. PRELIMINARY SKETCH FOR EIGHTEENTH STREET METHODIST EPISCOPAL CHURCH, SOUTH, WACO, TEX.



PLAN XXX. SECOND FLOOR. PRELIMINARY SKETCH FOR EIGHTEENTH STREET METHODIST EPISCOPAL CHURCH, SOUTH, WACO, TEX.



PLAN XXX. GROUND FLOOR. PRELIMINARY SKETCH FOR EIGHTEENTH STREET METHODIST EPISCOPAL CHURCH, SOUTH, WACO, TEX.



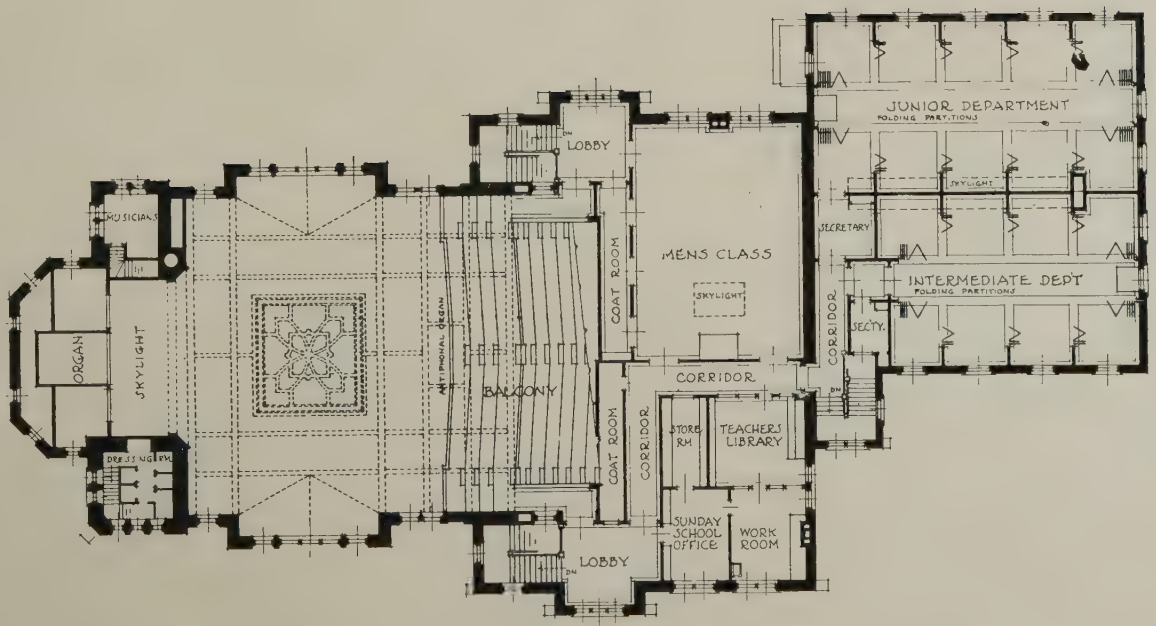
«FIRST FLOOR PLAN»

—*Foote, Headley & Carpenter, Architects.*

THE LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N.Y. PLAN XXXI

Observe thoughtful conveniences throughout. Note extended administrative provisions, (1) for church work on this floor; (2) for Sunday-school work in floor above. Unique expansion of auditorium is shown on page 65. For picture of Ladies' Parlor, see page 90.

This building has attracted nation-wide attention; the plans have been published in various periodicals, including the *Architectural Record* (November, 1919).

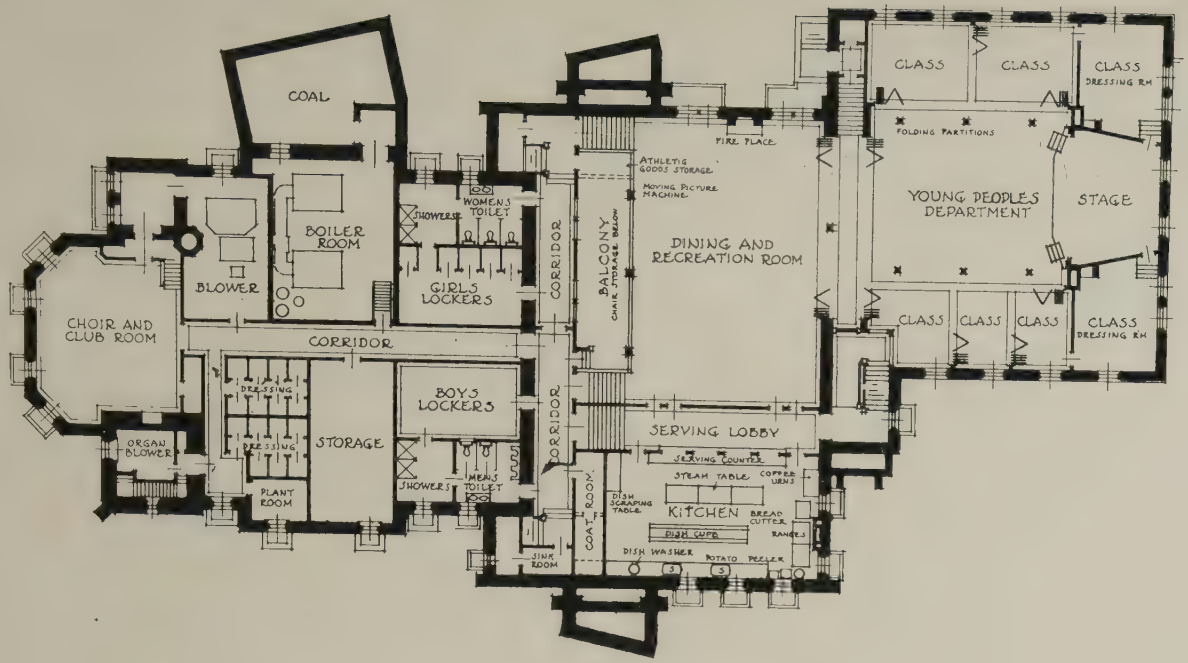


SECOND FLOOR PLAN

THE LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N.Y. PLAN XXXI

Note especially "coat rooms" and "corridors" throughout the building. Observe also carefully devised entrances and exits throughout.

A special sound-proof partition separates the Junior and Intermediate departments. Effort is made by means of folding partitions to secure in these departments both assembly and class room space. A better and less expensive arrangement is to have department assembly and closed-in class rooms.



BASEMENT PLAN

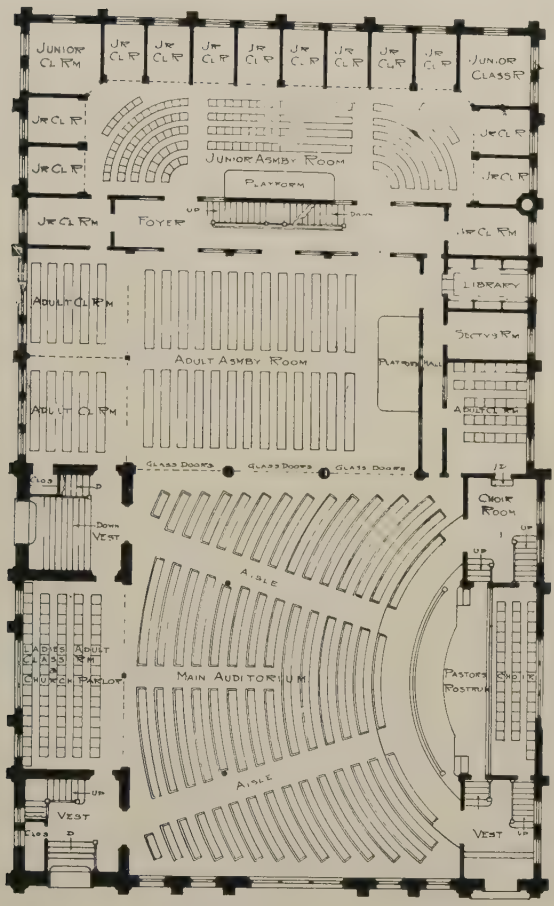
THE LAKE AVENUE BAPTIST CHURCH, ROCHESTER, N.Y. PLAN XXXI

Observe complete provision for recreation, serving and various types of entertainment. The recreation room with balcony and chair storage underneath, and lockers and showers for boys and for girls, is in line with the author's conclusions in Chapter XV. The moving picture machine indicated throws pictures on the "stage" screen in the Young People's department. For picture of the kitchen, see page 91.

THE BELMONT METHODIST EPISCOPAL CHURCH, SOUTH, ROANOKE, VA.
PLAN XXXII

The Belmont Methodist Episcopal Church, South, Roanoke, Va., Plan XXXII, was completed in 1919 at a cost of $90,000. The building has attracted favorable attention. A careful examination will disclose many thoughtful features.

The Sunday-school provisions meet the most exacting demands; separate class rooms and separate sound-proof assembly rooms for the departments are provided throughout. The slope of the ground is such that the Beginners and Primary departments are entirely above grade level. The social hall, seating 260, with its stage and its arrangements for serving is especially pleasing.



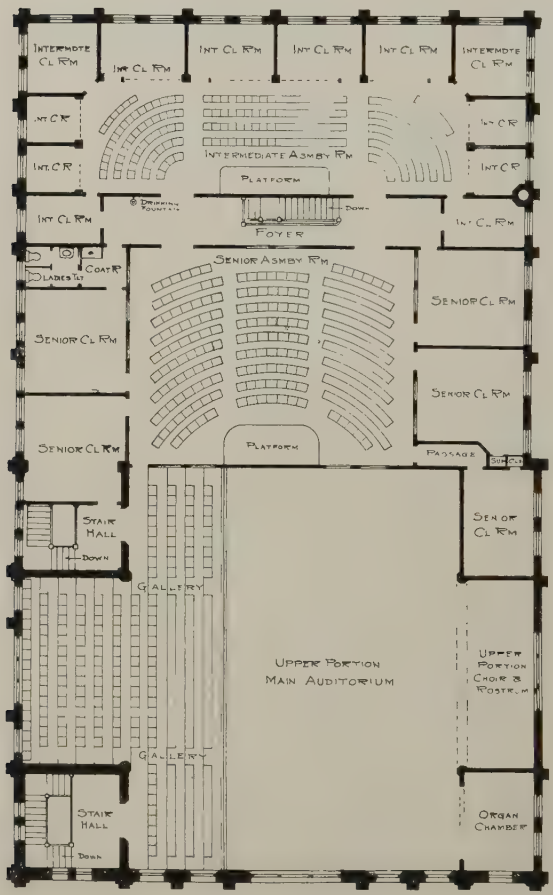
FIRST FLOOR PLAN

BELMONT M.E. CHURCH, SOUTH.
ROANOKE, VA

HERBERT L. CAIN,
CHURCH ARCHITECT.

PLAN XXXII

Observe especially the expanding auditorium. Main auditorium seats 440; Parlor adjoining, 75; Adult Assembly room, 260; Gallery, 225; grand total in sight and hearing of the pulpit, 1000.



SECOND FLOOR PLAN

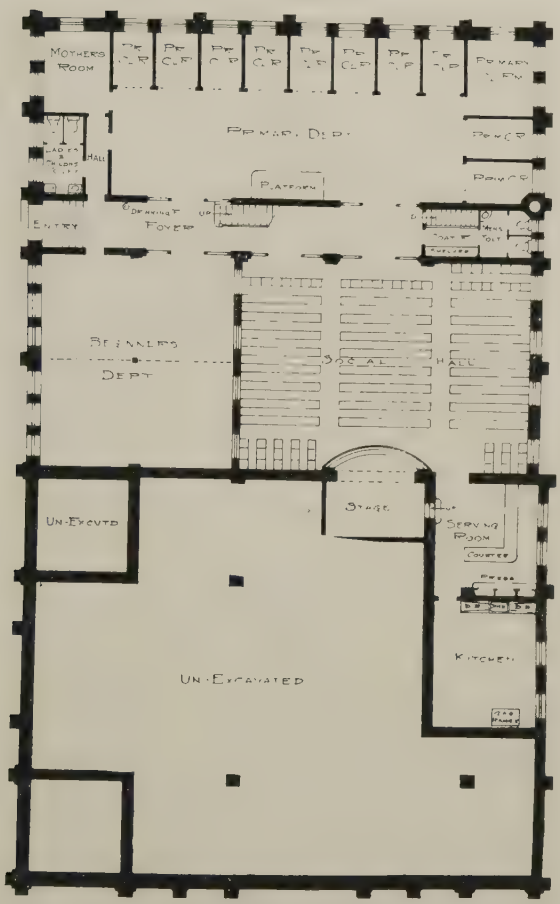
BELMONT M.E CHURCH, SOUTH,
ROANOKE, VA

—*H. L. Cain, Architect.*

PLAN XXXII

Observe the economy in this building; it is laid out on straight lines; its rooms are all rectangular; there is no waste space.

In seating the Junior and Intermediate departments, it may seem advisable to divide the seats into two divisions instead of three, so that there will be a natural division of boys and girls. See these departments in Plans XXVIII and XXIX.



GROUND FLOOR PLAN
OF
BELMONT M.E. CHURCH, SOUTH
ROANOKE, VA

PLAN XXXII

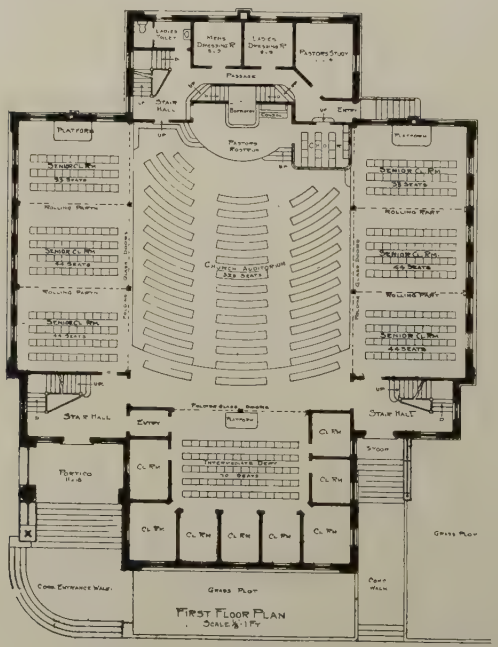
Provisions are made for a Sunday school numbering 800 to 1200. It is of course unnecessary and impracticable to provide a special assembly room for such a school and hence such general assemblies of the school as seem desirable are held in the main auditorium. Generally each department conducts its own program of worship and teaching.

The Randolph Street Baptist Church, Richmond, Va., represents a successful effort to secure large accommodations at low cost. The architect's estimate of cost is $50,000.

Church auditorium seats	325
Senior Class room seats	242
Intermediate Department seats	70
Balcony seats	180
Total seating capacity	817

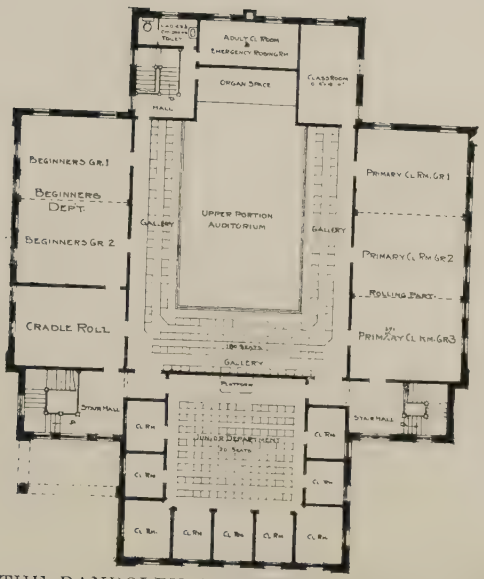
The building offers Sunday-school accommodations as follows:

Cradle Roll and Beginners	90
Primary Department	90
Junior Department	120
Intermediate Department	70
Senior Department	242
Adult Department	684
Total possible Sunday school	1396

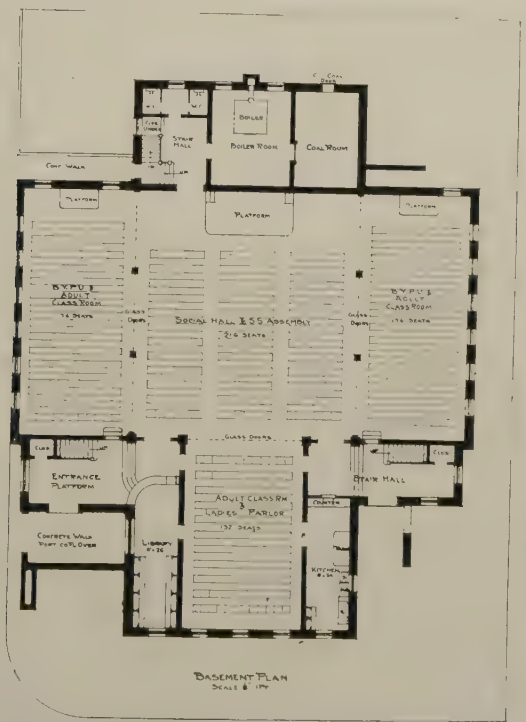


—*H. L. Cain, Architect.*

PLAN XXXIII. THE RANDOLPH STREET BAPTIST CHURCH, RICHMOND, VA. FIRST FLOOR.



PLAN XXXIII. THE RANDOLPH STREET BAPTIST CHURCH, RICHMOND, VA. SECOND FLOOR



PLAN XXXIII. THE RANDOLPH STREET BAPTIST CHURCH, RICHMOND, VA. GROUND FLOOR

XXI

PLANS FOR VERY LARGE SUNDAY SCHOOLS

Sunday schools numbering into the thousands are not uncommon in various sections of the country and the developments of the last decade justify the expectation that the increase in the number of schools with very large enrollment will be rapid in all parts of the land. As the school increases in size it becomes increasingly difficult to make more than the most general suggestions for its housing. The plans offered in this chapter undertake to present the best thought of Sunday-school workers in co-operation with architects who have given the problem close and intelligent study. The problem assumed is the economical housing of a large Sunday school, along with all other activities of great modern churches.

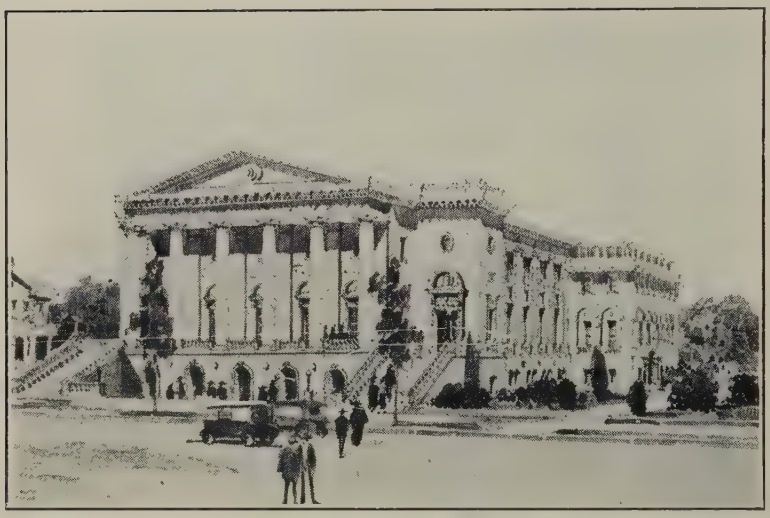
—Geo. W. Kramer & Son, Architects.

THE TRINITY-UNION METHODIST EPISCOPAL CHURCH, PROVIDENCE, R.I.
SUNDAY-SCHOOL SECTION AT LEFT AND AUDITORIUM AT RIGHT

First Baptist Sunday School, Mayfield Ky.
An A-1- School Largest in the State.
Attendance 1380
Photoed by Burton Studio
Mayfield Ky.

THE FIRST BAPTIST SUNDAY SCHOOL, MAYFIELD, KY.

One of the many Sunday schools in various parts of the land with enrollment exceeding 1000. In this chapter we show how such schools may be properly housed.



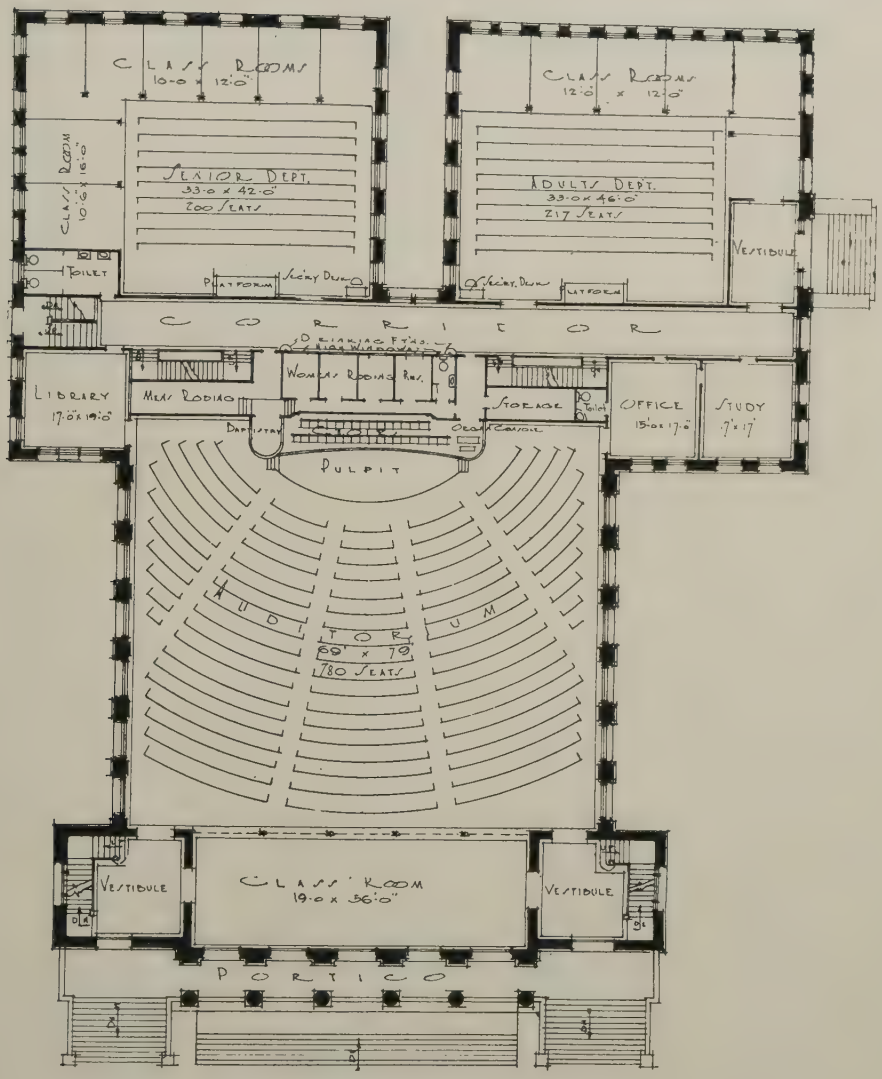
—R. H. Hunt, Architect.

PLAN XXXIV. PROPOSED CHRISTIAN CHURCH

In this proposed Christian Church we have an auditorium which, with the large class room adjoining and with the spacious balcony, will seat 1,550 people. Since this is actual measured capacity, it may be well to remind ourselves that seating space is ordinarily very much over-estimated.

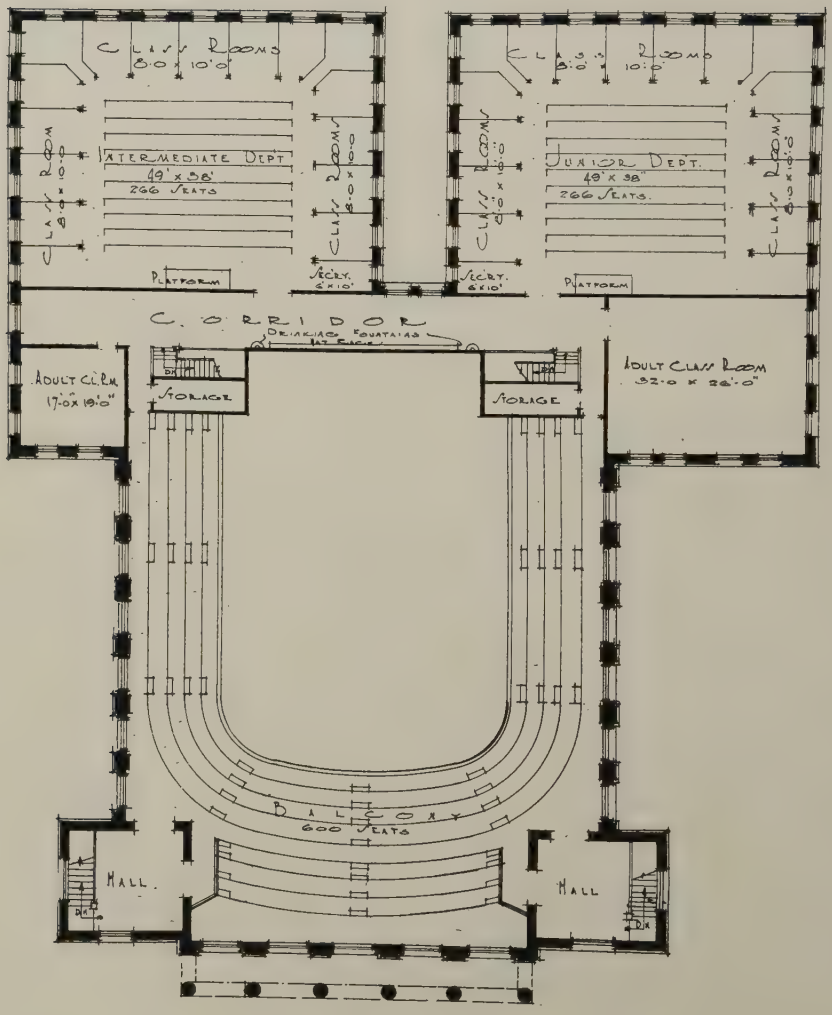
The building will house comfortably a Sunday school of 1,200, and under pressure would accommodate much larger numbers.

Complete departmental provision is made throughout with class rooms ample in number and dimensions.



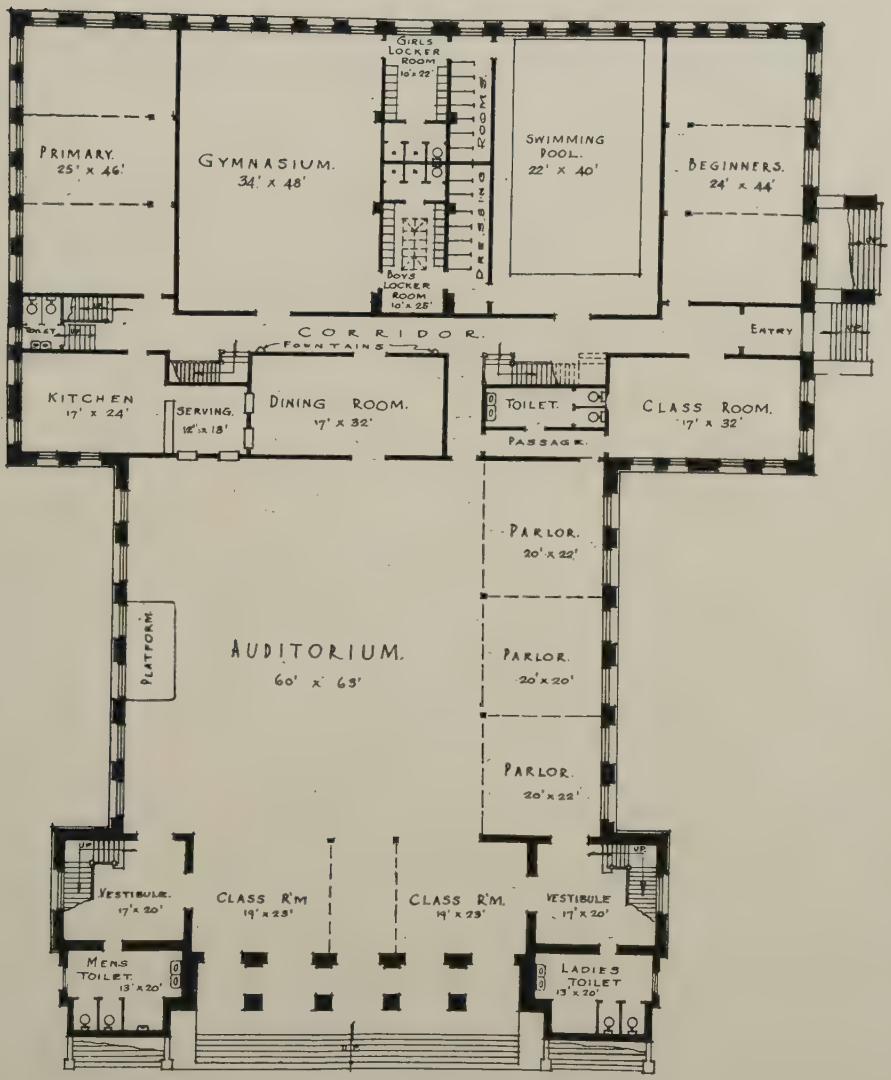
—*R. H. Hunt, Architect.*

PLAN XXXIV. PROPOSED CHRISTIAN CHURCH



PLAN XXXIV. PROPOSED CHRISTIAN CHURCH

Observe complete departmental provision; large schools of the type now in mind must of course be conducted departmentally.



PLAN XXXIV. PROPOSED CHRISTIAN CHURCH

Note especially varied and complete provisions for all types of serving and for entertainments and recreation.

—H. L. Cain, Architect.

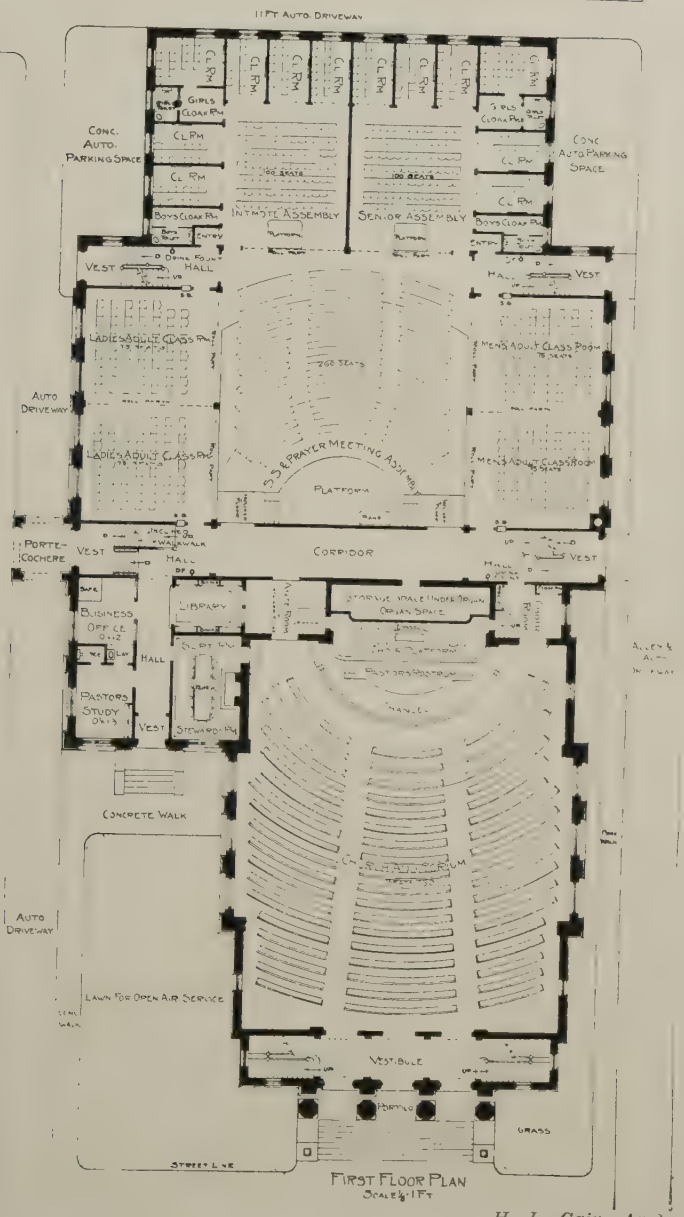
PLAN XXXV. PERSPECTIVE, FRONT ELEVATION, MARKET STREET METHODIST EPISCOPAL CHURCH, SOUTH, PETERSBURG, VA.

This great building, like Plan XXXIV, offers an entirely separate auditorium which is without Sunday-school suggestions. This is of course always desirable, but involves large expense.

The marked feature of the building is the provision of a large expanding Sunday-school assembly room which when opened out to its capacity seats a total of 940; the main Sunday-school assembly seats 260; four adult class rooms adjoining seat 300; the two department rooms at the back seat 100 each, and the balcony seats 180.

Since the larger class rooms, and the department rooms open into the main assembly which will not be in use at the same time, the movable partitions are permissible.

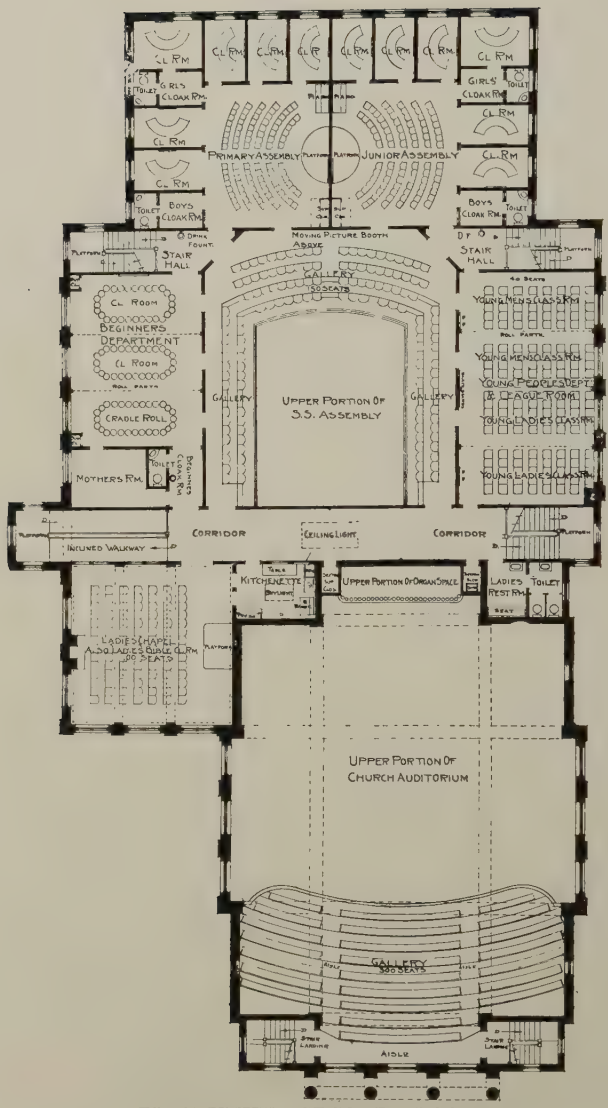
When frequent assembly of the whole school is desired, and the ability of the congregation permits, such an arrangement as is here proposed is admirable.



—*H. L. Cain, Architect.*

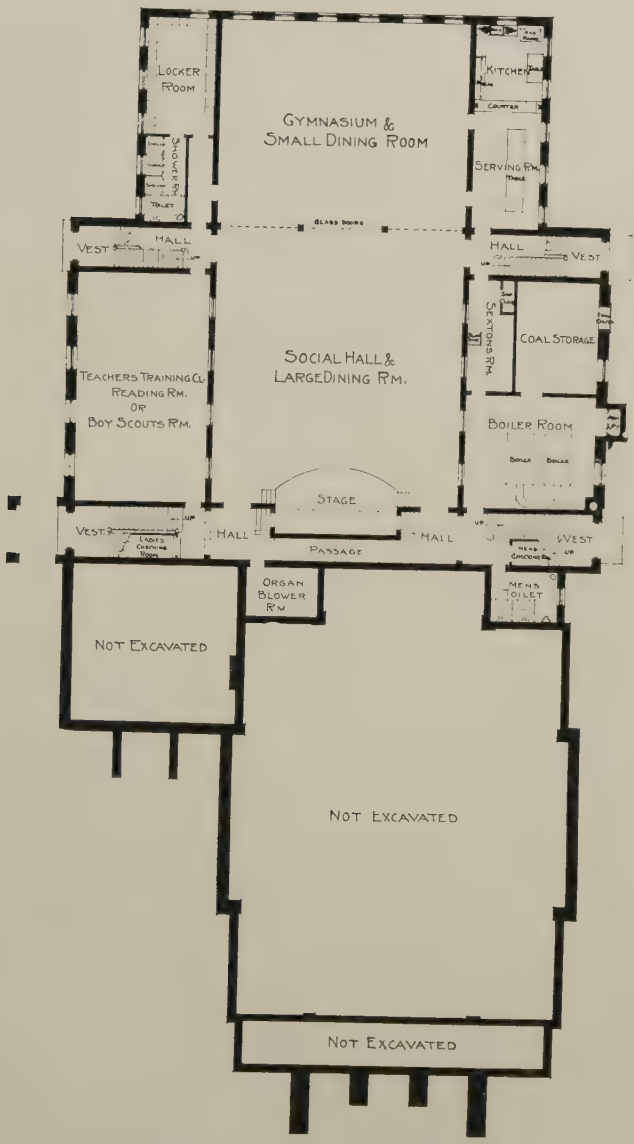
PLAN XXXV. FIRST FLOOR, MARKET STREET METHODIST CHURCH, SOUTH, PETERSBURG, VA.

Note especially the large separate auditorium with capacity, including balcony, of 1050. Observe also group of four administrative offices, easily accessible to the public, on the left of the auditorium.



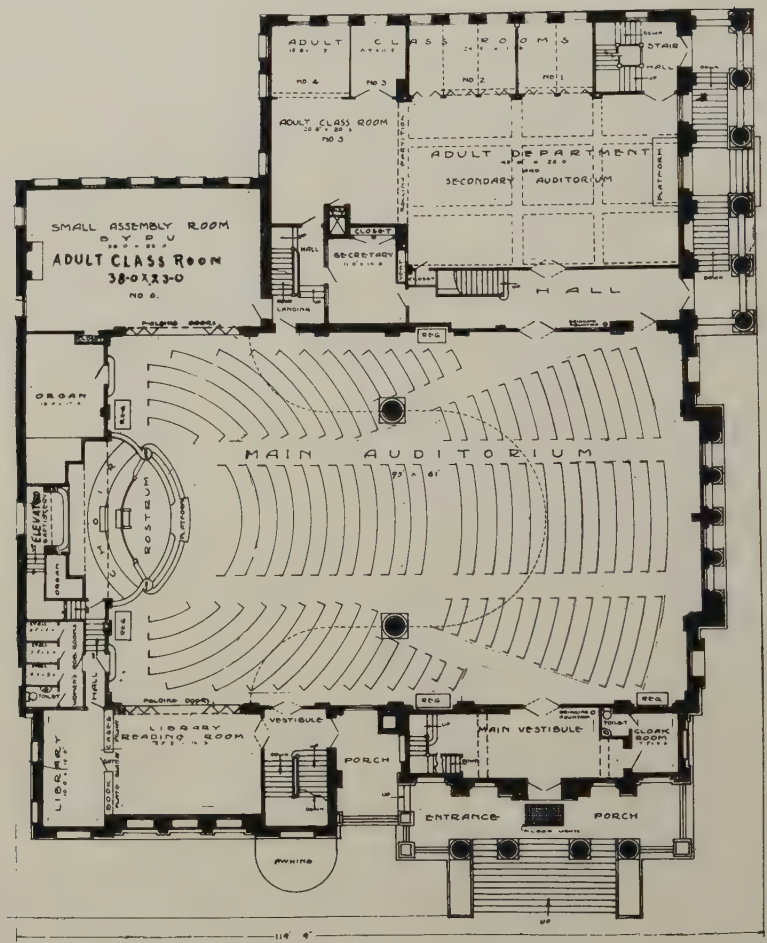
PLAN XXXV. SECOND FLOOR

At the back are two departments, Primary and Junior. At the left of the gallery is the Beginners department with a mother's room close by. Since approach to this floor is by an incline instead of stairs, the objection to placing Beginners and Primaries on the second floor is minified. Opposite is the Young People's Department, divisible by folding partitions into four large class rooms. The Ladies' Chapel, shown with fire-place, will be an appreciated feature.



PLAN XXXV. GROUND FLOOR

On this floor we have extensive provisions for serving, recreation and athletics. Showers take the place of swimming pool.

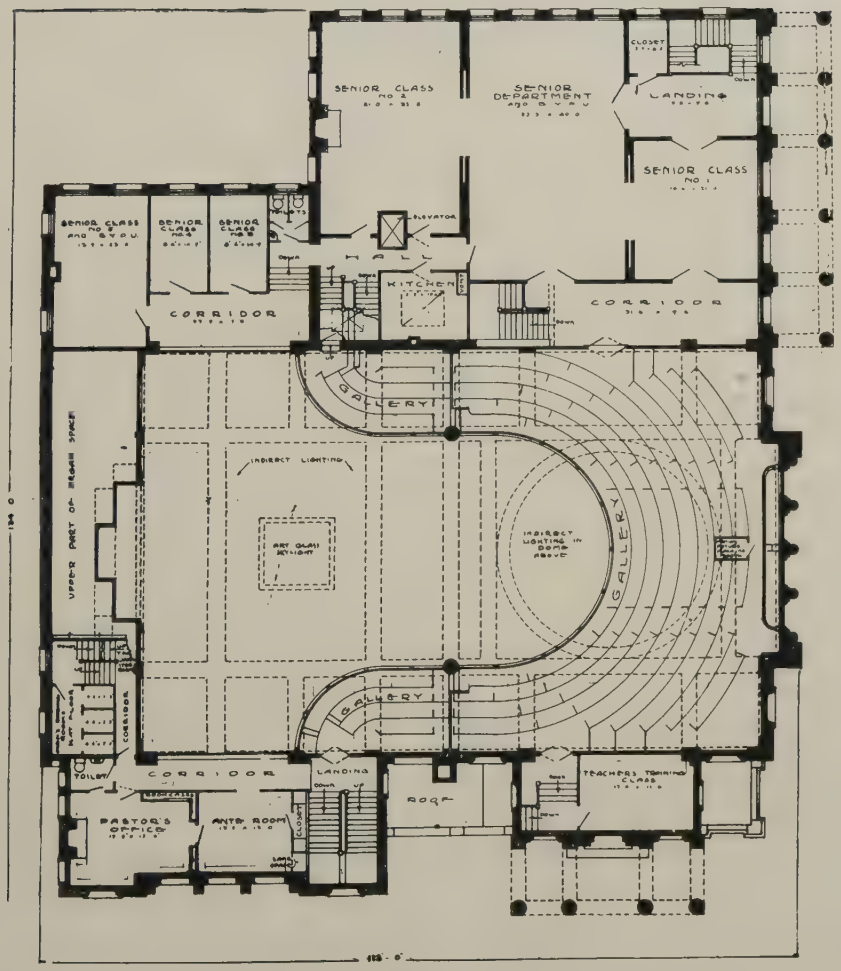


—*C. W. Bulger & Son, Architects.*

PLAN XXXVI. FIRST FLOOR, THE FIRST BAPTIST CHURCH, SHREVEPORT, LA.

Special features: (1) Elevated baptistry back of chorus choir; (2) secondary platform in front of, and lower than, the rostrum; (3) large auditorium capacity. Main auditorium seats 800 and can be supplemented to 1400 by use of balcony and of "Small Assembly Room" and Library.

The building is 113 feet by 134 feet.

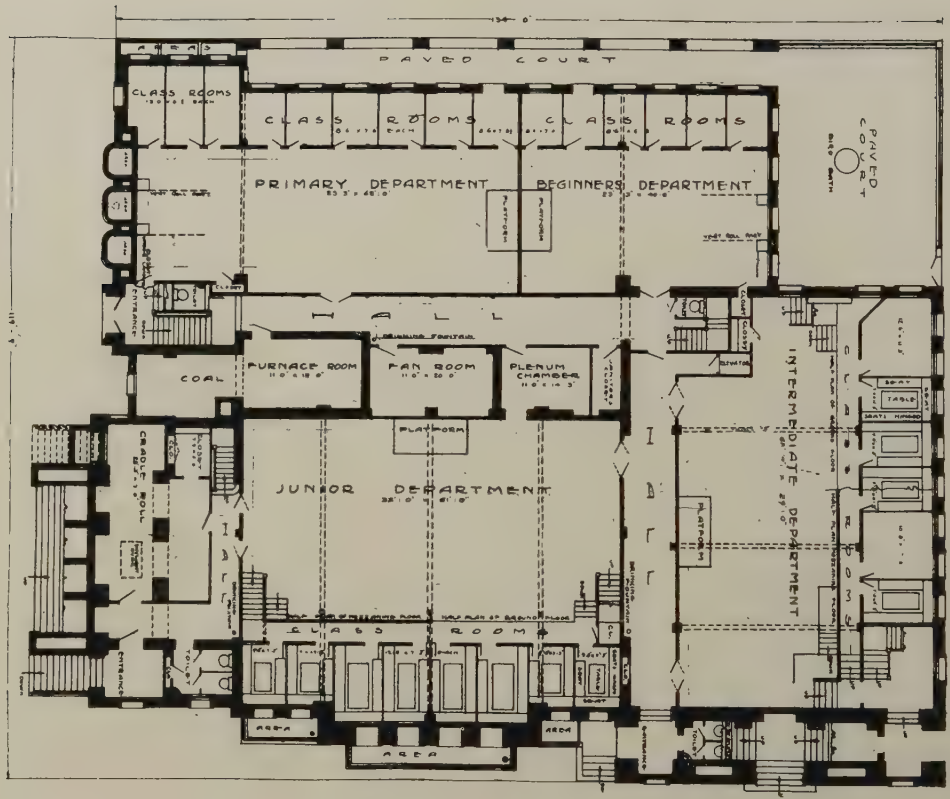


PLAN XXXVI. SECOND FLOOR, FIRST BAPTIST CHURCH, SHREVEPORT, LA.

The Senior department serves the young people both in Sunday-school and social life.

Robing rooms for men are shown at left of organ, while the robing rooms for women are on the floor below.

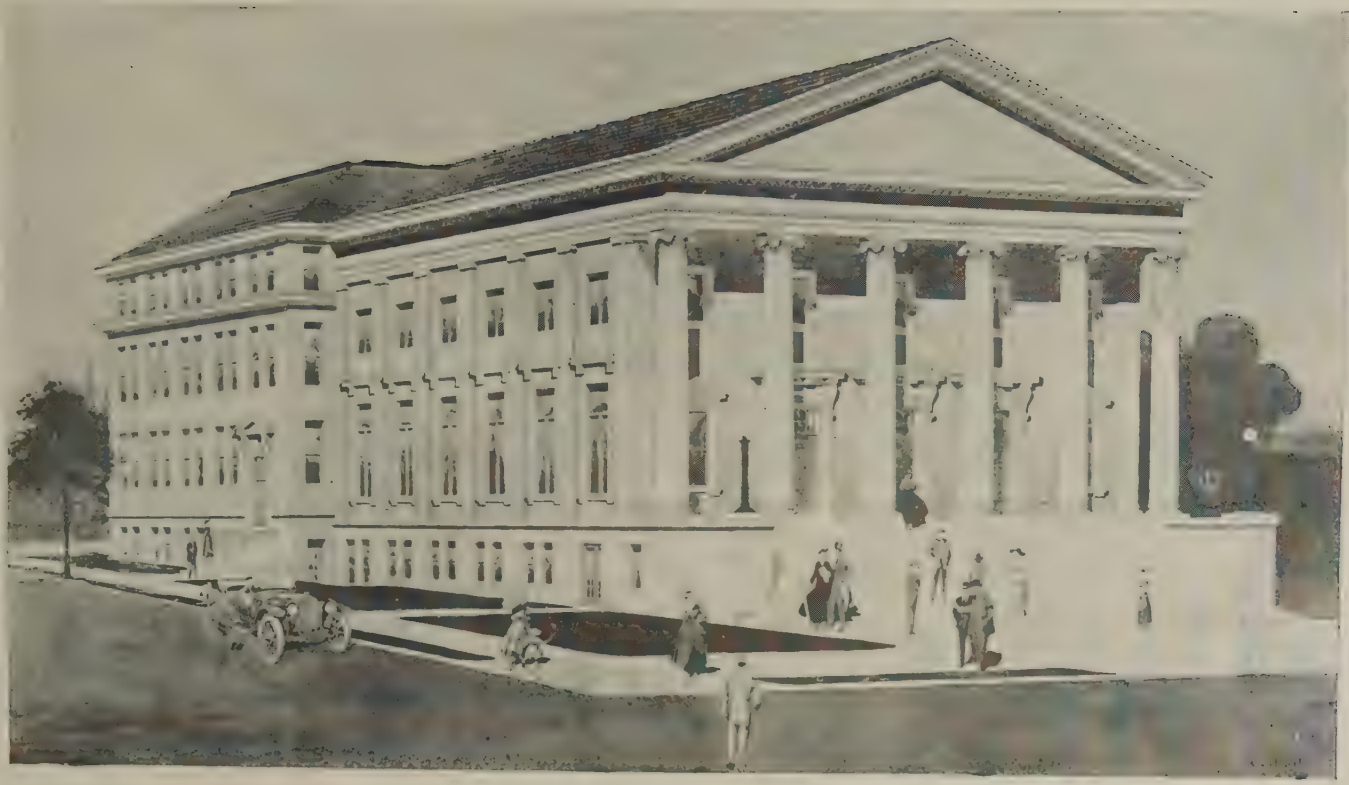
At the back of the gallery is a booth for motion picture machine.



PLAN XXXVI. GROUND FLOOR

Both the Junior and Intermediate departments have class rooms on mezzanine floor, a total for each of these departments of sixteen class rooms.

Observe "drinking fountains," conveniently arranged toilets, and many thoughtful provisions throughout the building.



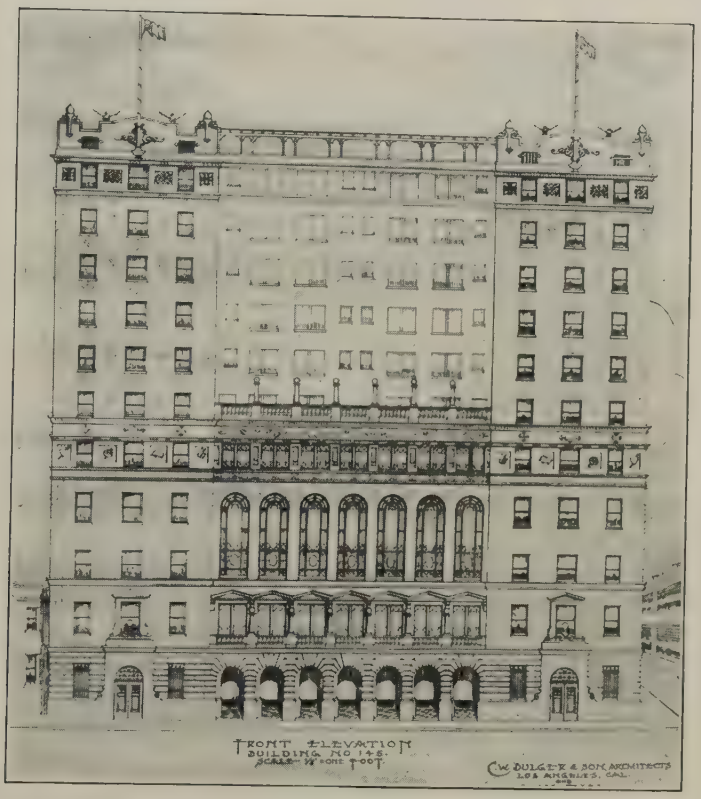
—*R. H. Hunt, Architect.*

THE FIFTH AVENUE BAPTIST CHURCH, HUNTINGTON, W.VA.

—C. W. Bulger & Son, Architects.

EXTERIOR PERSPECTIVE, PROPOSED ECONOMY BUILDING FOR VERY LARGE CHURCH AND SUNDAY SCHOOL

This building is designed for the utmost economy consistent with good construction and reasonably good design; is most suitable for a downtown location where the architecture corresponds somewhat to the surrounding business buildings. Note especially omission of outside approaches.



PROPOSED COMBINATION BUSINESS AND CHURCH BUILDING

Churches in down-town centers may with to follow the example of the Tremont Temple, Boston, and other churches by erecting great combination church and business buildings. In the sketch here shown, the first five stories are designed for church and Sunday-school purposes; the upper six stories comprise offices whose rentals are to help to support the church. The section of the building designed for church purposes offers an auditorium seating 3,000 people, and provisions for a Sunday school of 2,000 to 4,000. Blue print floor plans showing arrangements may be secured from the architects, C. W. Bulger & Son, Dallas, Tex.

XXII

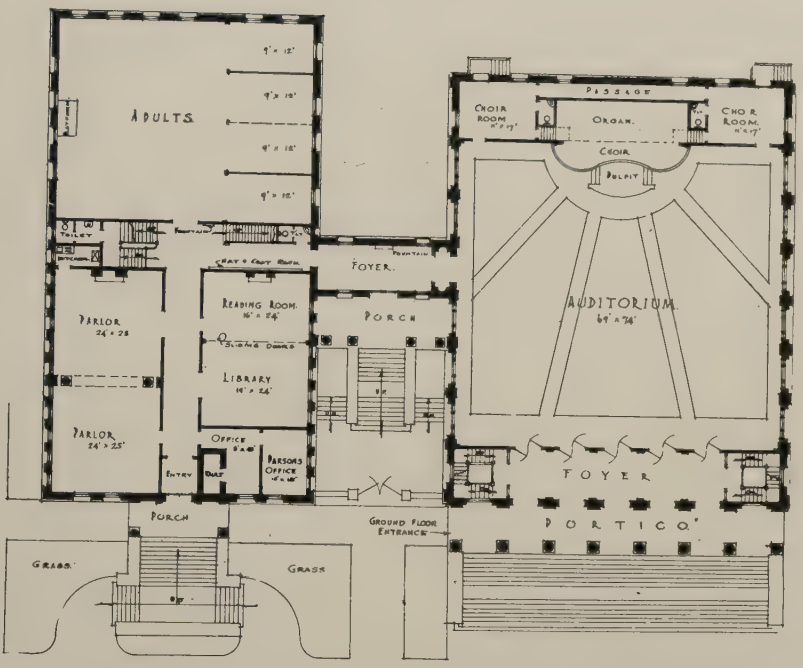
SEPARATE SUNDAY-SCHOOL BUILDINGS

Under many conditions it will seem advisable and even necessary to have a separate building for the Sunday school. Architects naturally experience serious difficulty in housing under one roof the preaching service and the teaching service. The preaching service calls for a reverent and worshipful auditorium in which the community may assemble to present themselves before God. The teaching service calls for an educational building with various assembly rooms and many class rooms.

Separate Sunday-school buildings will, of course, vary from the one room erected in the church yard for a class or a department to the great structure designed to house the Sunday school numbering hundreds and even thousands. In this chapter we can scarce do more than present the general idea with some illustrations showing how the idea has been practically worked out.

—*R. H. Hunt, Architect.*

METHODIST EPISCOPAL CHURCH, SOUTH, FT. SMITH, ARK.
Separate Sunday-school house. (See floor plans on the following pages.)



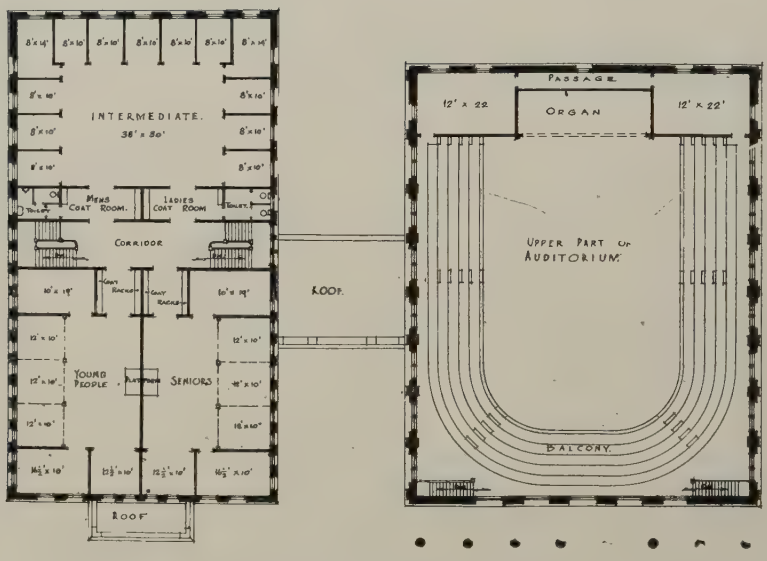
—*R. H. Hunt, Architect.*

FIRST FLOOR, METHODIST EPISCOPAL CHURCH, SOUTH, FT. SMITH, ARK., WITH SEPARATE COMMUNITY HOUSE

(Exterior on preceding page.)

The above plan is drawn on a large scale and provides for a congregation of upwards of 1,200, and a Sunday school of 600 to 1,000. With slight readjustments the plan would suffer reduction and might thus be suggestive to churches which do not require so large provisions.

Note convenient entrance to main auditorium through "Foyer" from the Sunday-school house.

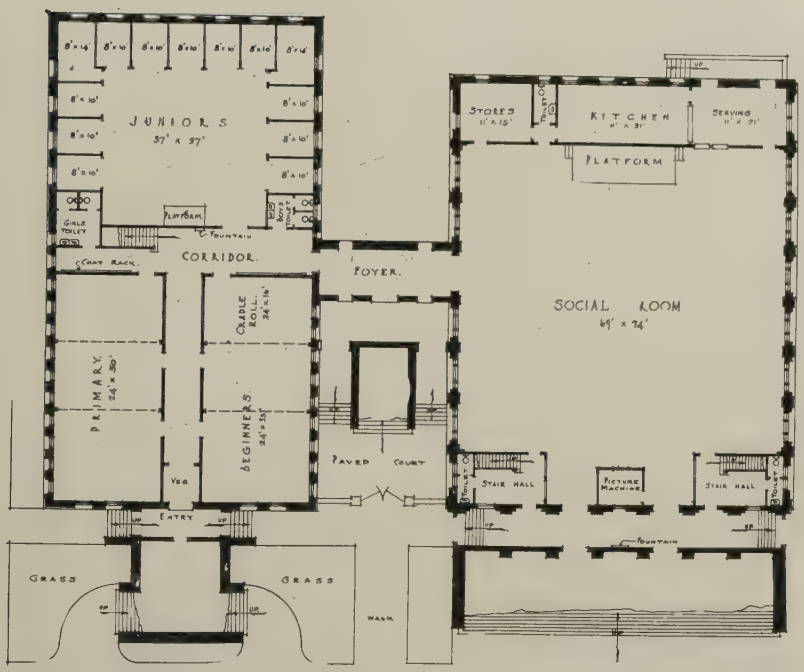


SECOND FLOOR, METHODIST EPISCOPAL CHURCH, SOUTH, FT. SMITH, ARK., WITH SEPARATE COMMUNITY HOUSE

Note complete departmental arrangements throughout, each department being separated from others by corridor or solid sound-proof partitions.

Entrance to main auditorium is from corridor on floor below, easily reached from this floor by two stairways.

The provision of "coat rooms" for each department will be appreciated.



GROUND FLOOR, METHODIST EPISCOPAL CHURCH, SOUTH, FT. SMITH, ARK., WITH SEPARATE COMMUNITY HOUSE

The ground floor is most suitable for Beginners and Primaries, provided it is above grade level; if below grade level, the dirt surrounding can be excavated and held by a retaining wall so that there is no sense of being beneath grade level.

The large social room will serve many good ends, such as playroom, recreation center, and banquets.

The First Baptist Church, Columbia, South Carolina, as is shown in the accompanying picture, found a happy solution of the problem of needed facilities in the erection of a separate building for its educational and institutional work. The classic building shown at the left of the picture was a model of strength and dignity. It did not seem to permit of any exterior alteration. Its beautiful and reverent auditorium fully met the demands of the preaching service. Happily the lot which long before had been used as a burying ground was available and, as may be seen in the picture, a commodious Sunday-school building arose among the marble slabs which mark the resting places of the departed. An attractive colonnade connects the new building with the old and the church has an effective plant for the housing of its growing activities. Suggestions for the planning of a separate Sunday-school building will be found in the various plans presented in the foregoing chapters.

WORSHIP AND EDUCATIONAL BUILDINGS OF THE FIRST BAPTIST CHURCH, COLUMBIA, S.C.

Old classic building, designed for preaching services, on the left; modern educational, social and recreational building on the right. The two buildings are connected by a colonnade.

SUNDAY SCHOOL AND COMMUNITY HOUSE, FIRST PRESBYTERIAN CHURCH, NASHVILLE, TENN.

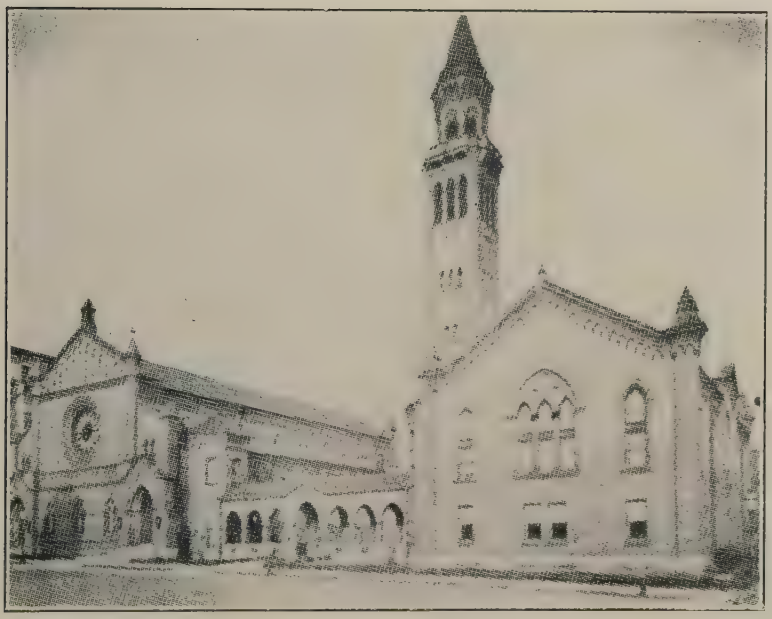
This four-story building, erected at a cost of $100,000, is impressive in design and offers housing for a variety of educational, social and missionary activities. It adjoins the main church structure which stands at the reader's left and yet is essentially a separate building. This promises to be an ideal way of remodeling old buildings, while the idea of a practically separate building will doubtless gain favor even when new construction is contemplated.

SUNDAY-SCHOOL HOUSE, EMMANUEL BAPTIST CHURCH, ALEXANDRIA, LA. AUDITORIUM TO BE ERECTED AT RIGHT

The Sunday-school and social building of the Emmanuel Baptist Church, Alexandria, La., is a model in refinement of finish and completeness of provision for the modern departmental Sunday school.

It is elegantly finished in quarter-sawed oak, and has numerous thoughtful provisions not ordinarily provided in church buildings. Much of the furniture, such as tables, etc., has been manufactured especially for the building. The building cost (1919) about $100,000.

The entire first floor is given to various types of social and community service. The second and third floors are subdivided into departmental and class rooms. All six departments of the modern Sunday school are provided with separate assembly rooms, while class rooms are provided throughout. A unique feature is a complete series of departmental libraries, one of which is shown in accompanying cut. The building was designed under the direction of Rev. Harvey Beauchamp, Field Secretary of the Baptist Sunday School Board, Nashville, Tenn.



THE SECOND BAPTIST CHURCH, ST. LOUIS, MO. AUDITORIUM AT LEFT; EDUCATIONAL BUILDING AT RIGHT

XXIII

REMODELING ONE-ROOM BUILDINGS

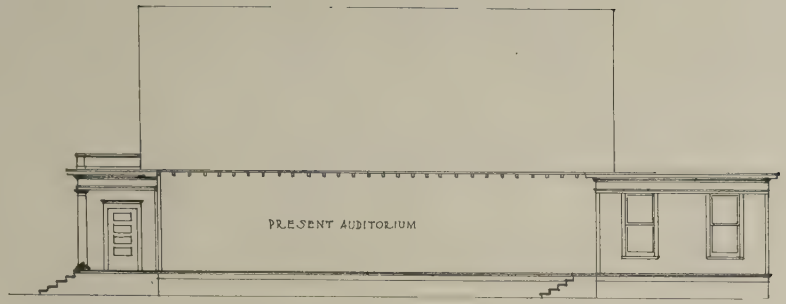
There are in this country 60,000 one-room church buildings. The church which worships and conducts all of its activities in such a building is sadly handicapped. New ideals of Sunday-school work and of church activity are permeating far into the country districts and our small churches are awakening to new visions. As they do so they find in their one-room houses a heavy handicap. In countless cases the present building might well give way to a new and really modern structure.

It is really wonderful what a skilful architect can accomplish in the way of remodeling present buildings, small or large. Furnish such an architect with these items of information and he will do the rest: (1) Size and description of lot; (2) kodak pictures of present building from two or three viewpoints; (3) dimensions of building, height of wall and pitch of roof; (4) penciled sketch of floor plan drawn to scale; (5) additional needs which ought to be supplied; (6) amount of money which is to be expended.

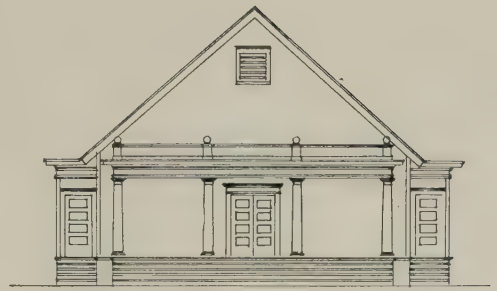
It is often difficult to determine whether the old building should be remodeled or whether it is wiser to pull down the old building and erect a new one. When serious doubt exists, the question may well be referred to an architect for his advice.

Assuming that the present building is in good repair and by certain modifications might still serve the community, we suggest the following methods of remodeling:

1. An addition may be made at the back of the building. This is illustrated in the drawing on the following pages.
2. An addition may be made at the back and on both sides of the building. See Plan V, page 103.
3. Changes may be made in the front of the building. See drawing on the following page.
4. An addition may be erected on one side of the building. See the Morganton Baptist Church, page 200.
5. Changes may be made inside the building. See page 202.
6. Any number of the above methods may be combined. See the Enon (Va.) Church, page 201, and the remodeled building, shown on page 203.

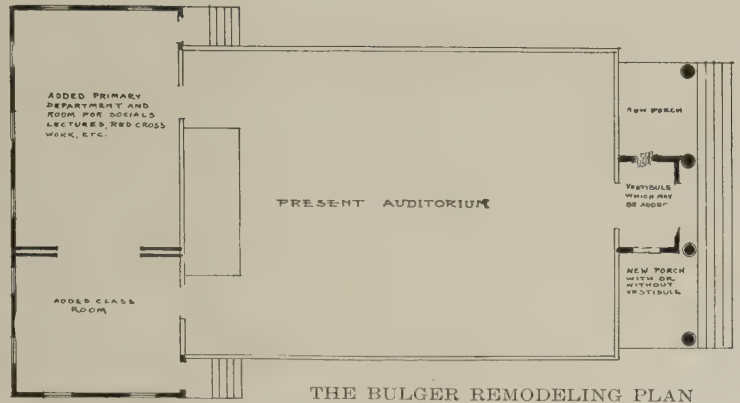


SIDE ELEVATION



FRONT ELEVATION

C.W. BULGER & SON
ARCHITECTS
DALLAS, TEXAS.


ADDED PRIMARY DEPARTMENT AND ROOM FOR SOCIALS LECTURES, RED CROSS WORK, ETC.
PRESENT AUDITORIUM
NEW PORCH
VESTIBULE WHICH MAY BE ADDED
NEW PORCH WITH OR WITHOUT VESTIBULE
ADDED CLASS ROOM

THE BULGER REMODELING PLAN

Showing how addition may be made at the rear and how a p orch, and possibly a vestibule, may be added in front. "Elevations" show the appearance of the finished building.

THE REMODELED BAPTIST CHURCH, MORGANTON, N.C.

INTERIOR VIEW, REMODELED BAPTIST CHURCH, MORGANTON, N.C.

The front has been modernized; a side wall has been removed and a large assembly room with balcony has been added. The original seating capacity has been practically doubled and extensive Sunday-school provisions have been secured.

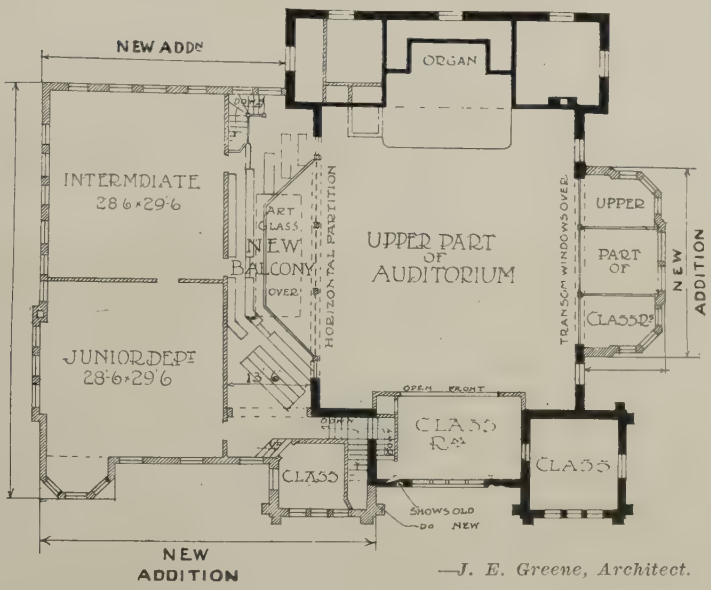
—*Frank L. Smith, Architect.*

A two-story addition at the back of a one-room building is possible where the building is of good height.

THE REMODELED ENON (VA.) CHURCH. (THE OLD AND THE NEW.)

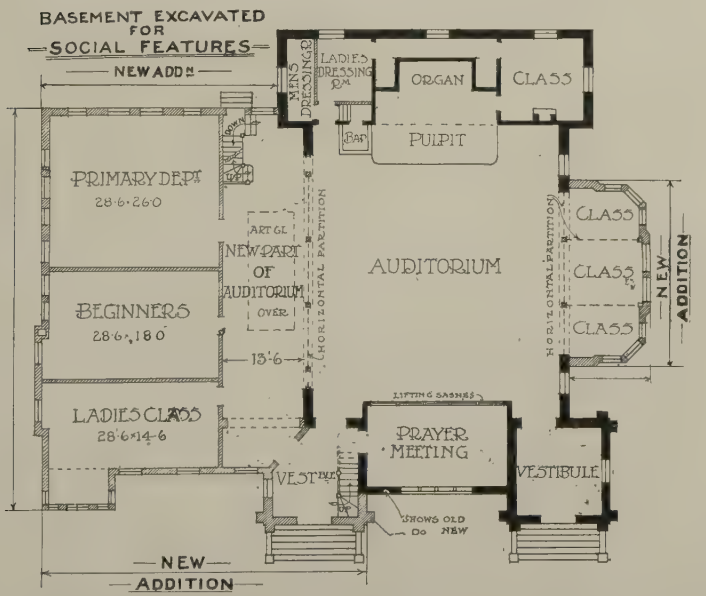
A REMODELED INTERIOR

This picture shows how one church secured five Sunday-school rooms and at the same time enlarged its seating capacity. This view is from the pulpit, looking toward the front of the building. It shows three rooms upstairs and two, one on each side of the vestibule, below. When height of ceiling does not permit the upper rooms, two rooms and vestibule may be secured. If seating capacity is in item of moment, both rooms may open into the main auditorium by means of folding doors, thus supplementing its capacity. This proposal involves only a small expense, and is easily possible in thousands of buildings.



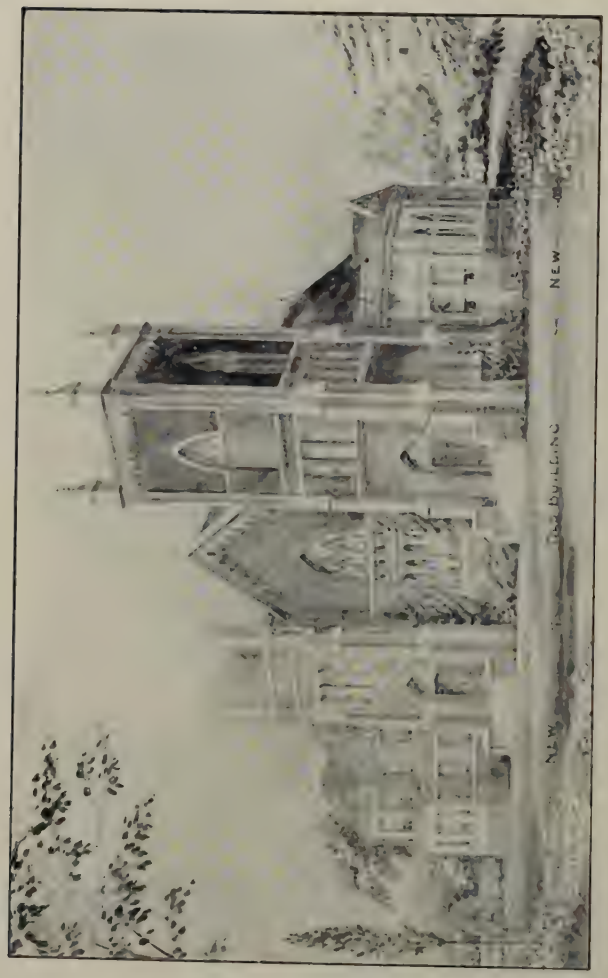
—*J. E. Greene, Architect.*

FIRST FLOOR, REMODELED ONE-ROOM BUILDING



SECOND FLOOR, REMODELED ONE-ROOM BUILDING

In the above remodeling of the Washington, Ga., Baptist Church these things are accomplished: (1) Auditorium capacity is greatly enlarged; (2) excellent Sunday-school provisions are secured; (3) the old building is utilized so as to save expense; (4) an attractive exterior is secured. This achievement illustrates the possibilities of a one-room building in the hands of a resourceful architect.



—J. F. Greene, Architect

THE REMODELED WASHINGTON, GA., BAPTIST CHURCH
Floor plans are given on the preceding page. Remodeled at cost of $20,000.

XXIV

REMODELING LARGER BUILDINGS

When we pass from the one-room building, the problems involved in remodeling become too complex to admit of specific guidance. Each particular building will present its own distinct problems which must find solution in accordance with the needs and the ability of the special congregation.

If a congregation finds itself possessed of a building which is too good to be discarded and which is yet inadequate to meet its growing needs, it would be well to have a good architect look the situation over and advise as regards the best method of procedure. It should be said in this connection that for service of this kind it is worth while to engage a resourceful architect of wide experience. It is usually much more difficult to remodel successfully an old building than to plan a new building. For this reason architects are not likely to seek such work. It is often really wonderful what can be accomplished by an architect who is willing to give time and study to such a problem.

If the walls of the present building are on straight lines it is usually comparatively easy to make needed additions. If the building is Gothic the difficulties will probably be greater than with the Classic style.

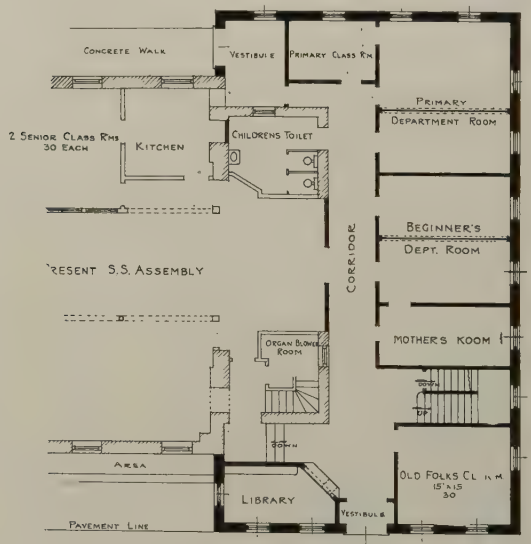
When there is sufficient lot room it is of course always possible to erect a distinct building. For illustrations see Chapter XXII, "Separate Sunday-School Buildings."

Since conditions must vary widely, we content ourselves with the presentation of drawings which show how two buildings were so remodeled as to offer complete departmental Sunday-school provisions. Either of these remodeled buildings might be used as a guide for the planning of new construction, and for this reason we more cheerfully give them space.

The new section of the building at Culpepper, Va., comprises three stories, while that at Norfolk, Va., comprises two stories. It would be easy to multiply these two illustrations many times in various parts of the country. Recent radical changes in ideals for the housing of church and Sunday-school activities will doubtless lead to further extended developments in this line.

MAIN FRONT SUNDAY SCHOOL BUILDING.
—*H. L. Cain, Architect*

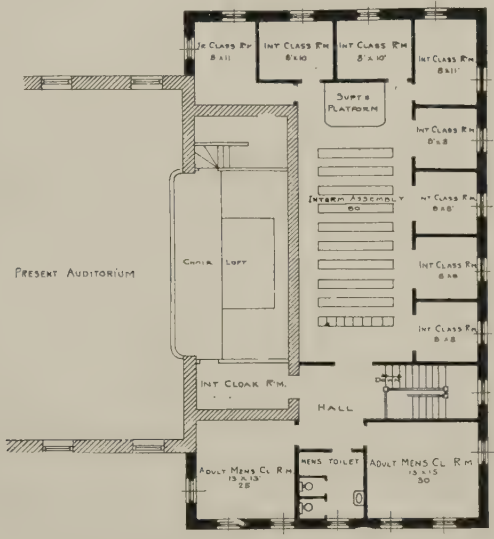
THE REMODELED BAPTIST CHURCH, CULPEPER, VA.



THE REMODELED BAPTIST CHURCH, CULPEPER, VA., GROUND FLOOR

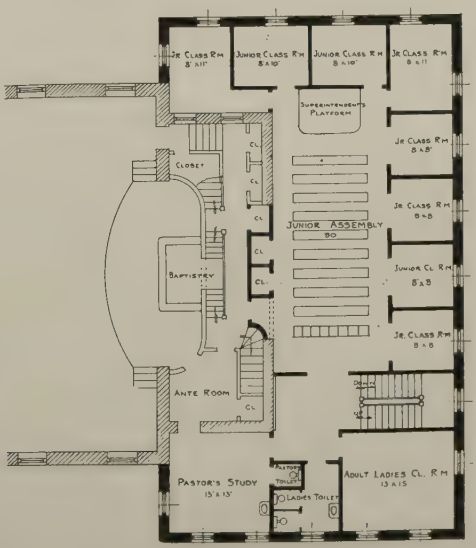
The remodeled Baptist Church, Culpeper, Va., is shown above, and on the following page. A remarkably complete Sunday-school building is thus added at comparatively low cost ($18,000) to an old building which offers a good church auditorium. The arrangement for Beginners, Primaries, Juniors and Intermediates is admirable.

Observe the toilets on each of the three floors and the many thoughtful conveniences, such as closets, library and Old Folks' class room, and kitchen on the ground floor, pastor's study, etc.

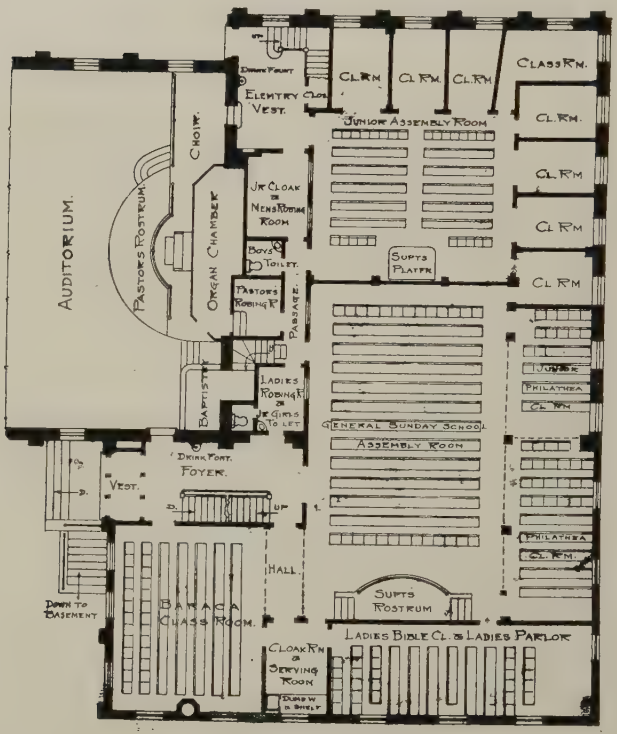


—*H. L. Cain, Architect.*

THE REMODELED BAPTIST CHURCH, CULPEPER, VA., FIRST FLOOR



THE REMODELED BAPTIST CHURCH, CULPEPER, VA., SECOND FLOOR



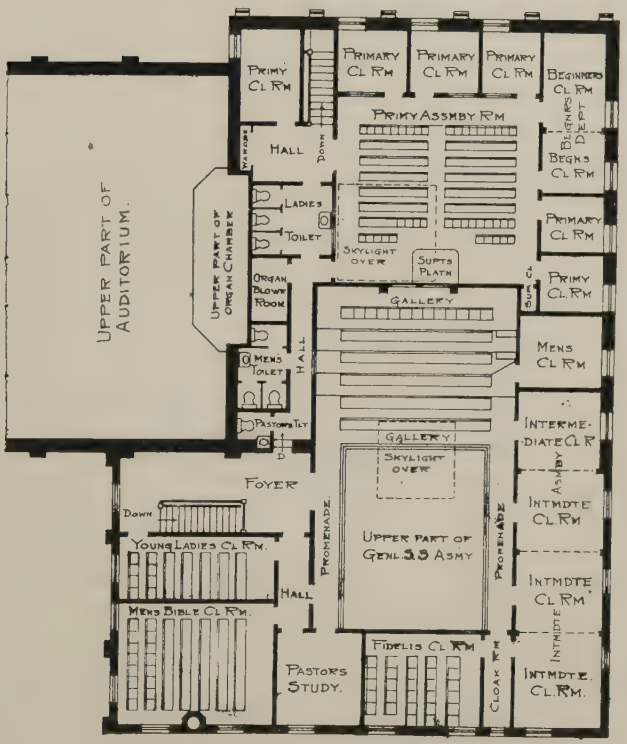
FIRST FLOOR PLAN.

—*H. L. Cain, Architect.*

THE REMODELED SPURGEON MEMORIAL BAPTIST CHURCH, NORFOLK, VA. FIRST FLOOR.

As suggestive of what may in general be accomplished in the way of remodeling present buildings, we offer in this chapter two successfully remodeled buildings. The added section of the Spurgeon Memorial Church offers in its two stories complete and ample provisions for a large Sunday school. The Sunday-school assembly room seats, including adjoining rooms and gallery, 325.

The remodeled section has a basement in which are the heating plant, a large kitchen and social room. The remodeling, as shown on this page and the next, cost (1919) $35,000.



SECOND FLOOR PLAN.

—*H. L. Cain, Architect.*

THE REMODELED SPURGEON MEMORIAL BAPTIST CHURCH, NORFOLK, VA. SECOND FLOOR.

Observe that the Primary assembly room is lighted by skylight above; the room seats 136. By throwing the Intermediate class rooms together, the entire space would make possible some departmental work, or the Intermediate assembly can be held in the gallery, which seats 78. The general assembly room and gallery are lighted by skylight above.

XXV

HINTS FOR PRACTICAL BUILDERS*

BY CLARENCE CASTLEMAN BULGER

CONCERNING MATERIAL TO BE USED IN CHURCH CONSTRUCTION

Frame construction is most commonly used in the erection of small rural churches. Brick veneer and solid brick walls follow in order. Hollow tile with cement or brick finish is sometimes used. Stone construction is, of course, always standard.

The advantages of frame construction are strength, economy, adaptability to changing conditions. It is better to use frame construction in growing communities where the choice is between an adequate and well-equipped building and one built of more expensive materials but without necessary equipment.

Brick veneer construction is coming more and more into favor. It possesses the strength of the frame construction and the finish and durability of brick construction. It is less expensive than solid brick construction.

Solid brick construction is standard for large church buildings, but it is doubtful whether it is superior to veneer construction for small churches. Rural churches are usually exposed to severe wind pressures and it is likely that the strength developed by the frame construction would be more effective in resisting wind pressure than the bulk and dead weight on which alone the solid brick construction depends. Another disadvantage of solid brick construction is damp walls. This often results in marring the interior finish on walls. Solid walls also are a hindrance to good acoustics, unless special treatment is given to prevent it.

*The author proposed to Mr. C. W. Bulger, Dallas, Texas, the subjects treated in this chapter, and upon his request, Mr. Bulger prepared the treatment, having in view pastors and others who plan to build and also architects and builders who may not have enjoyed wide experience in meeting these problems. It is, of course, difficult to offer directions as regards construction which will apply in all parts of the country. Practical adaptation must therefore be made of the suggestions offered in this chapter.

Hollow tile construction is comparatively new. It is preferable to solid brick at about the same cost. Hollow tile with cement finish on the exterior is cheaper than solid brick and costs about the same as brick veneer construction. Hollow tile makes a dry wall and one remarkably strong.

As Regards Foundations

Reinforced concrete is without doubt the best material and method of construction for foundations, where suitable native stone is not available. Our limitations in this chapter will allow us only to touch on this subject.

In the first place, concrete can be handled by comparatively unskilled labor and the materials are usually available. Secondly, concrete is the most durable material known, especially where dampness is encountered. Thirdly, concrete properly reinforced with steel rods develops the kind of strength necessary for foundations.

For the small rural church, bois d'arc blocks are frequently used and are very satisfactory. We have seen such blocks re-used after their removal from a wrecked building thirty years old. They should be bedded in concrete footings.

Brick piers are not satisfactory for foundation use, although commonly used, unless laid up in pure cement mortar. Dampness has a tendency to disintegrate common brick. Where pier foundation construction is used, same may be either bois d'arc, brick, or concrete. The concrete piers are probably the most expensive on account of the forms. All piers should have concrete footings.

Where masonry-wall construction or brick-veneer construction is used there should be a solid concrete foundation. The most economical form of concrete foundation is the pier and girder construction. This consists of piers extending down to clay or rock, located at the concentrated bearing points, proportioned according to loads, with reinforced girders extending on top of the natural earth (without excavation) from pier to pier continuously. Such a foundation should be laid out by a competent architect. Such a foundation has been found to be reliable under the most unfavorable soil conditions, where no other kind has been satisfactory. In these cases, it is necessary to bore post holes for the piers to a total depth of ten feet in some instances. These holes are filled with concrete forming piling.

A more expensive concrete foundation is the solid wall with extended footings buried as required to secure good solid earth. This varies to such an extent as to require an expert to determine just the kind of earth required for a particular load.

METHODS AND MATERIALS FOR ROOFS

The roofs commonly used for small rural churches are heart cypress or cedar shingles. These are reliable and durable, but only the best grade should be used. The thick ends should measure two inches to five shingles. Shingles may or may not be treated, although preservative treatment prolongs their durability and improves their appearance. The best size for shingles is five inch dimension with two nails to each shingle.

There is a new shingle on the market which is used extensively, known as the asphalt-slate shingle. It requires solid, continuous sheathing of the rafters, which is very desirable under any condition for the strength of the building. There are several brands of these shingles, most of which are satisfactory and offer a ten-year guarantee. The objection to these shingles has been that they flutter under the influence of a strong wind. Some manufacturers have overcome this by coating the backs of the shingles so that they cement together. This roof has the advantage of being practically fire-proof. Most manufacturers offer directions for laying these shingles.

Tile roofing is the most satisfactory roofing from the standpoint of durability and appearance. It is not prohibitive in cost. Its success depends largely on the roofer, whose qualifications should be carefully examined. This type of roofing should not be used on frame buildings on account of inappropriateness.

Slate and asbestos shingles are similar in method of application, cost, and general appearance. They make a good roof where the cost does not seem to make their use impracticable.

THE CONSTRUCTION OF THE BAPTISTRY

In our practice, both for small and great churches, we advocate the wood-framed, metal-lined baptistry. This consists of substantial foundation and framework sheated solid inside. The lining should be galvanized iron—locked, riveted and soldered together at joints. The interior is treated with red mineral paint followed by building

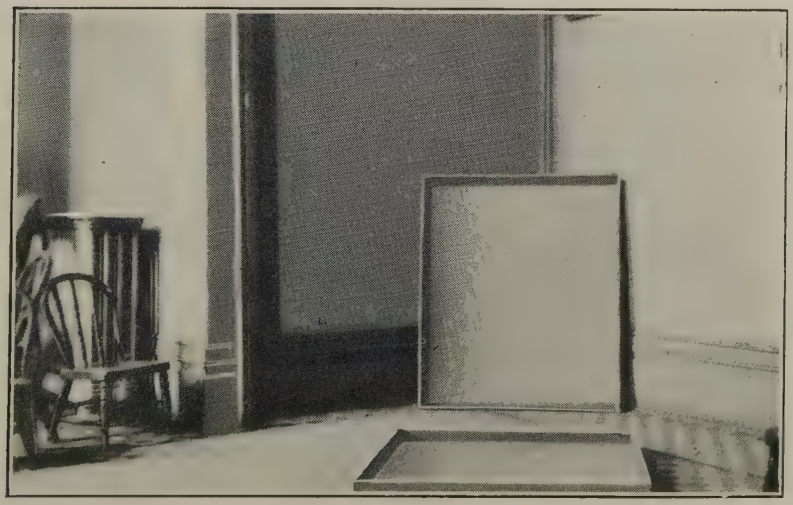
up with flat white and finished with two coats of best grade enamel. This construction will last indefinitely under ordinary usage. We have examples nearly twenty years old which are as good as new.

Another type of baptistry is of concrete construction. We do not advise this on account of the danger of leaking and the initial expense. Such baptistries may do well for a number of years and then give trouble. The best treatment for inside of concrete baptistries is marble or tile.

As to the size, a full size baptistry should be eight feet long, five feet wide, and three and one-half feet deep. A minimum size baptistry would be seven feet long, four feet wide, and three feet in depth. Every baptistry should have two depths arranged to accommodate children and adults. Thirty inches is a suitable depth for the average child; forty to forty-two inches is desirable for adults. The raised place might properly be in the extreme front of the baptistry, leaving the center for adults. The water level should be six inches below the top of the baptistry to prevent the water from splashing over.

The Treatment of Robing Rooms

In small churches the robing rooms can be made sufficiently large to be used for other purposes, such as secretary's room or class room. When it is desired to use the room for a robing room, galvanized pans



can be provided and installed on the floor to receive the wet garments. These pans should be about two inches in depth with a dull roll edge rim and three feet square. The pans may be placed in a closet when not in use.

The most desirable arrangement is to have a room of convenient size with stalls provided for individual candidates. One of these stalls should be a toilet. Where it is not feasible to provide permanent partitions for these stalls, canvas curtains should be provided. These stalls should be about three and one-half feet wide, and from four to six feet in depth. They sould be adequately lighted.

In special robing rooms, where it is not intended to use the space for other purposes, it is desirable to have either a concrete or galvanized iron water-tight flooring covered with slats for quick and satisfactory draining. These under-floors should be connected with a storm sewer.

CONCERNING THE BASEMENT

We advocate basements wherever practicable. With the use of properly proportioned concrete, properly water-proofed, dry basements may be had in almost any locality. A basement affords the most economical space in connection with the building and is the most easily accessible.

Basements are practicable because they can be made dry, light, accessible, economical, and convenient, experiences to the contrary notwithstanding.

A basement is economical, as the same roof and foundation are made to serve additional space equivalent to the entire floor size of the building. In most types of construction, a large portion of the outside walls may be utilized for the basement walls, the chief additional expense being the basement floor, windows, and door-openings and interior.

If the basement is not at present needed and hence is not to be completed, it is advisable to provide for a basement in the rough for finishing in the future. We have in mind churches which would have been compelled to abandon their buildings a few years after completion had it not been for the resource they had in an unfinished basement.

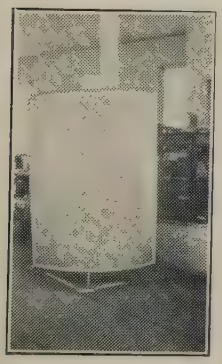
A basement may be used (1) for future expansion; (2) for varied social activities; (3) for departments of the Sunday school; (4) for separate Sunday-school assembly; (5) for special classes of the Sunday school, or for young people's work; (6) for gymnasium, swimming pool, women's work, lectures, moving pictures, stereopticon, etc.

THE LOCATION OF HEATING PLANT

(1) In case steam (or hot water) is desired the boiler may be located at almost any point, preferably on the north side of the building. (2) In cases of the gravity air system, the heater should be placed centrally. (3) In case of forced air system, a central location is desirable, although not necessary.

SUITABLE HEATING FOR SMALL CHURCHES

The simplest scheme for heating a small church is to provide an ordinary cast iron stove with top feed and surround it with a sheet iron jacket made by any local tinner. This jacket should have an opening for operating the damper and for access to the ash chamber and several openings for air inlets at the bottom about two inches square or round, or it may be supported two or three inches above the floor as to admit intake of air. The jacket should be entirely open at the top and should have neat finish on top to avoid sharp edge. It should be at least twelve inches larger than the largest diameter of the stove and as tall as the stove. This jacket might be lined with asbestos to prevent heating up, the idea being to throw the heat currents upward. This simple device which is illustrated in accompanying cut is inexpensive and greatly contributes to the comfort of the audience.



There are several school-house heaters with outside air connection on the market which would serve for church heating. They are much more expensive than the one described above, and for the kind of heating needed in a church, would not serve much better.

We recommend the warm air heating system where it can be afforded. It is the quickest and cheapest central plant system, and

besides can be made to work as a ventilator of the building as well. An economical installation would be to have only two openings, an inlet and an outlet for the entire building. The furnace should be located in the basement near the cold air inlet. Such a plant should be laid out by a competent heating man.

WHERE ELECTRIC LIGHTS ARE NOT AVAILABLE

The simplest scheme for an effective light for a rural church is the unit gas generating lamp. In this each fixture is a separate unit and must be supplied with materials independently. This lamp gives a brilliant white light and two are sufficient to light an ordinary 40x60 church building.

There are modern gas and electric machines which afford illumination equal to the best city service. These machines are operated by gasoline engines. The Detroit Light and Heating Co., of Detroit, Mich., offers a gas plant, located outside the building. This building is piped for light and heat as for ordinary gas. The Delco Electric System is manufactured by the Domestic Engineering Co., of Dayton, Ohio. The Kewanee Private Utilities Co., of Kewanee, Ill., have a similar system. Both manufacture electric current for lighting, using a gasoline engine for power.

THE ADVANTAGES OF "PIVOT WINDOWS"

We regard the side pivot window as superior to any other type for churches, for the following reasons:

1. They divert the air currents upward, preventing draughts.
2. They form an awning for protection from rain and sun when open.
3. They are easily operated and controlled.
4. They are economical.

There is now on the market a friction pivot which does away with the expensive adjusters. These pivots hold the sash in any position desired. In case it is decided to screen these windows, place one-half of the screen on the outside and one-half on the inside, leaving sufficient room in the center for operating the sash. Wire guards for the protection of the glass are screwed on the sash itself.

The Level Floor, the Bowled Floor, or the Inclined Floor

The shape of the auditorium sometimes determines the kind of floor. A level floor is always in order and is the cheapest arrangement. In very small rooms it is satisfactory, but the rostrum should be elevated more than usual in proportion. The inclined floor is no more expensive in itself, but usually involves the raising of the height of the building. The bowled floor is the same in that respect, and in addition involves making the girders supporting the floor circular, and each one parallel, being described from a radius point. The chief difference between a bowled and an inclined floor is that every point in a bowled floor equidistant for this center is level. Thus a curved pew on a bowled floor would be level, while on an inclined floor one end would be higher than the other. Hence only straight pews should be used on the incline floor, while only curved pews should be used on the bowled floor.

How To Construct the Bowled Floor

First, provide circular girders each level from end to end and true to a given radius and elevated each above the other according to the rate of incline. Place joists to radiate from the radius point over the girders. Use 1x4 sub-flooring in comparatively short lengths, following the shape of the floor, and surface as required ready for the finish floor. Before laying the finish floor, lay radiating strips of flooring from front to rear over bowl form about twelve feet apart at the widest point, and cut the flooring strips between these. There are other methods of laying a bowled floor, but they are all derived from the principle involved in the above.

A very satisfactory method, if 1½ inch flooring can be obtained, is to curve the flooring concentric with the girders supporting the bowled floor; thus the floor boards would parallel the curves of the seating and be at right angles to the aisles.

A New Architecture for Modern Churches

The present prevailing types of architecture grew out of the needs and conditions of the times in which they were developed and of the church life which they were designed to house. Since the times have changed and church life and activities are widely different, the types of church architecture must also change.

The fundamental reason for abandoning Gothic architecture for churches of the progressive type is that it is not adaptable. It subordinates utility to form. As expressed in lines it is vertical, whereas the enlarging progressive church requires horizontal architecture. But even the horizontal Classic is becoming too restricted for use in clothing the modern church, and an entirely new type is demanded. It is the opinion of the writer that any established style of architecture is an anachronism when applied to this problem. It is manifestly improper to subordinate the plan to the design, and yet no established form of architecture permits the freedom of treatment required.

In order to ascertain what style of architecture best befits the modern church institution, let us describe it. It is that architecture which expresses and provides for the uses to which the building is devoted in the most economical and practical manner. It should be the natural outgrowth of the ideal floor plan. It must be elastic, permitting windows and doors and other practical features just where and how they are needed. It must be sympathetic, yet dignified, welcoming rather than formally inviting, substantial, sincere, simple and beautiful. The question arises, are these things possible? The answer in the affirmative can be only a prophecy, as no such church architecture has ever been devised. It is the belief of the writer that it can be done, and it must be done before the progressive church is adequately and appropriately housed.

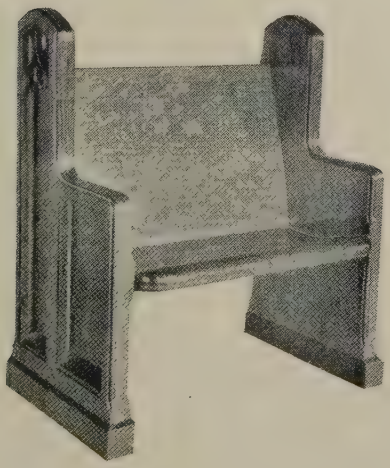
XXVI

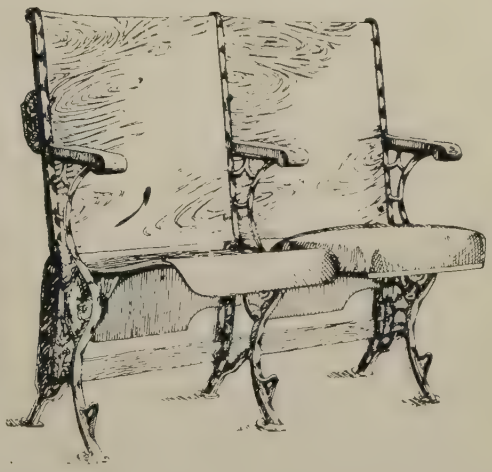
SEATS, TABLES AND CABINETS

In a previous chapter we have mentioned the furnishings needed in the departments of the Sunday school. Because of the importance of seats, tables and cabinets, and because of the difficulty of making satisfactory arrangements for these items of furniture, some suggestions are offered in this chapter and the next.

Seating for the Auditorium

For the church auditorium, pews are generally preferred. When properly built they are very comfortable. They are economical in that children and adults occupy only so much space as may be needed. Churches which are able to do so have long been accustomed to provide cushions for the pews, thus greatly adding to their comfort.





Opera chairs have for a long time divided honors with the traditional pew. They have by recent improvements been rendered noiseless and more durable than they formerly were. The chair has arm-rests and thus insures against crowding. Unless all of the chairs

are of good size, exceptionally large persons may be embarrassed and may be thus kept away from the services. The usual widths are 18 to 22 inches; no chair should be less than 18 inches wide. Opera chairs are frequently used in galleries even where pews are used on the main floor.

When aisles converge the chairs are brought into line on the edge by using chairs of different widths, say some chairs 18 inches wide, while the usual width will be 19 or 20 inches. Thus successive tiers of chairs can thus be made to form a perfect aisle line.

Pews should as a minimum be spaced 2 feet 9 inches from back to back. Opera chairs can, as a minimum, be spaced 2 feet 6 inches from back to back.

How to Estimate Seating Capacity

It is commonly supposed that 6 square feet per person is a sufficient allowance for seating. It is really necessary to figure 7 or 8 square feet in the ordinary church auditorium if exact seating capacity is desired; 7 square feet, if straight pews are used, and 8 square feet if curved pews are used, assuming that the platform, aisles and all spare space are included in the estimate of floor space. In department rooms and generally in small rectangular rooms with little lost space, 6 square feet per person is a reasonable allowance.

A given building will seat more people with straight seating than with curved seating. Mr. Kidder estimates that a room which, with straight seats will accommodate 700 people, will offer only 600 seatings when curved seats are used.

The exact seating capacity of a given room can only be determined by drawing the seats to a scale on the plan, allowing for each sitting 18 inches with pews and 19 or 20 inches with chairs. See, for example, pages 170 and 173 and other plans in this book. Since seating capacity is so commonly over estimated, it may seem desirable to ask the architect to test in this way the seating capacity of the various rooms in any proposed building. Special efforts have been made to insure that estimates of seating capacity throughout this book should be dependable.

Aisles

No "blind aisles" should be allowed. These are aisles which open for a given distance and then are closed by longer pews. See for

example occasional illustrations in these pages. Plans on pages 149, 155 and 158 offer excellent examples of seating which avoid the blind aisle.

No wide aisle directly in front of the speaker. The reason for this must be evident. "The center aisle leading to a pulpit violates every principle of the psychology of public speaking."

Aisles should be spaced from ten to eighteen feet apart, according to the arrangement of the room. For reasons which must readily appear, pews should not in any event be more than 16 or 18 feet long.

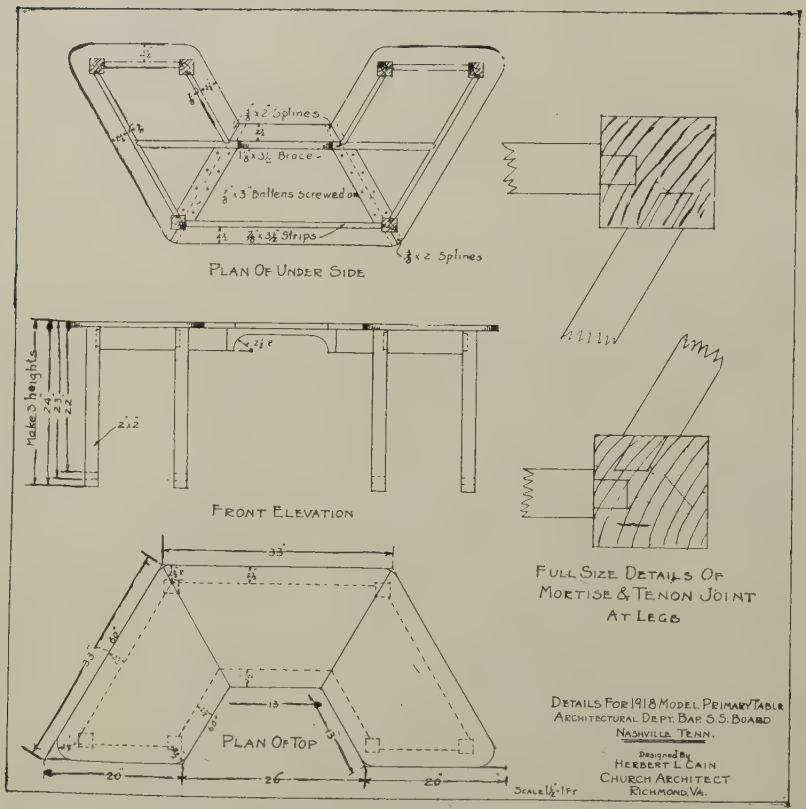
Main aisles should be four to five feet wide, while secondary aisles may be two or three feet wide.

CHAIRS FOR SUNDAY-SCHOOL PURPOSES

For Sunday school assemblies, the folding chair presented herewith is acceptable; two or more may be joined together, as in the cut.

Single chairs unattached are hardly desirable for assemblies of any kind, since they are so readily displaced, and thus tend to present a disorderly appearance.

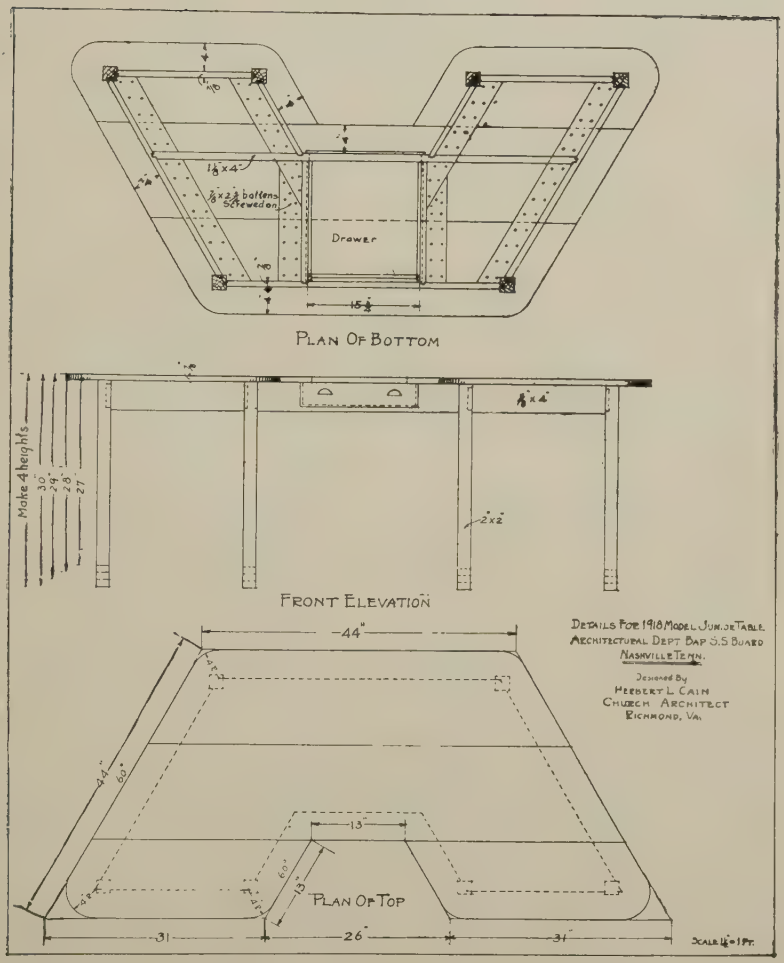
Opera chairs or other attractive and comfortable seats may well be provided for adult classes where inclination and financial ability seem to justify.

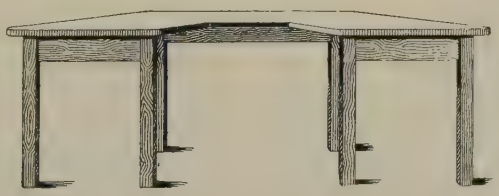


PLANS AND SPECIFICATIONS FOR MAKING THE BAPSUBO PRIMARY TABLE

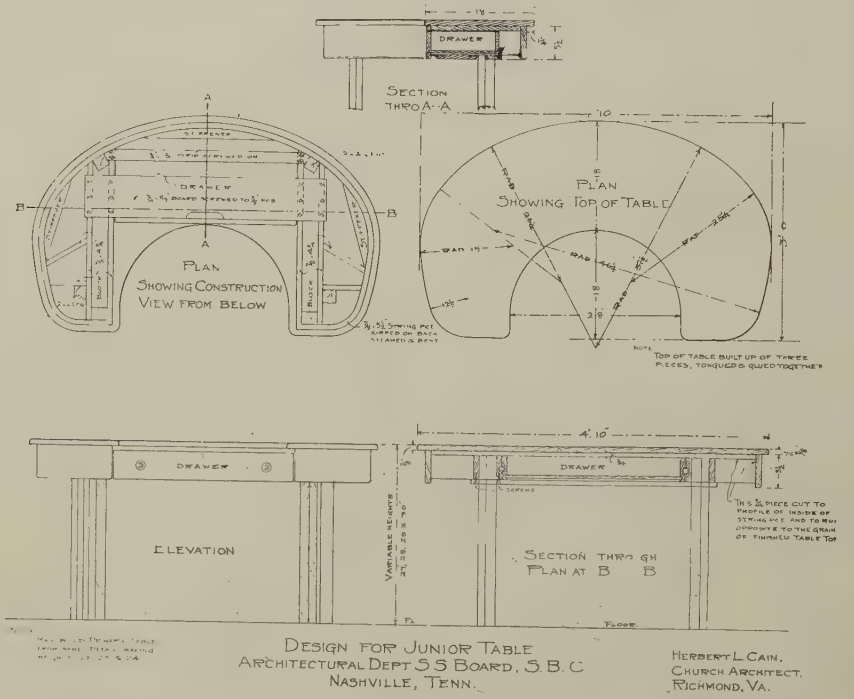
We present on this page and the pages following plans and specifications for making the Bapsubo and the Richmond tables. These are scientifically-planned tables for Sunday-school classes. Some church architects include these tables in the building contract.

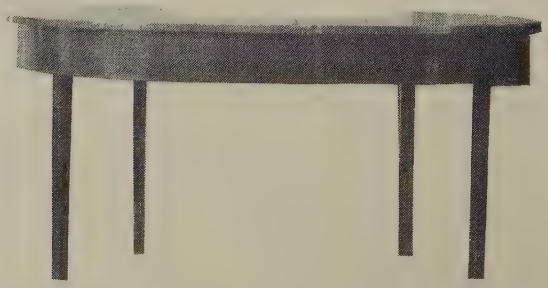
The Bapsubo table is on straight lines and can be constructed by any carpenter. The Richmond table, which on the whole is preferable, is built on curved lines and thus calls for mill work.





PLANS AND SPECIFICATIONS FOR MAKING THE BAPSUBO JUNIOR TABLE





PLANS AND SPECIFICATIONS FOR MAKING THE RICHMOND TABLE

The Richmond Table is so designated because this type was brought to perfection in Richmond, Va. The Primary table is the same as the Junior, except for the height which should be 22, 23 and 24 inches. This is probably the most attractive and convenient table

yet devised. It can be made by a millright in accordance with plans and specifications given above, or it may be ordered from the Baptist Sunday School Board, Nashville, Tenn.

CABINETS

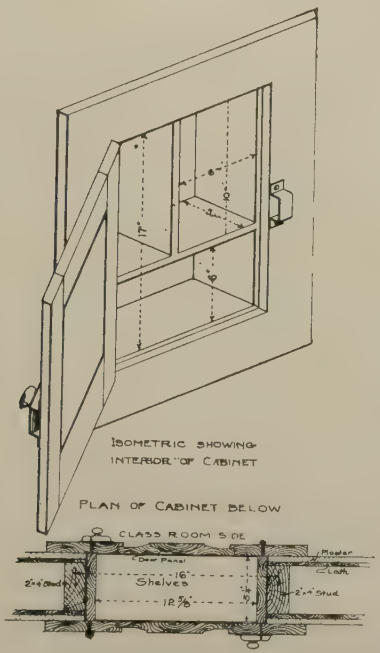
The organist and choir should be provided with a cabinet for the proper care and protection of their musical supplies.

Cabinets should of course be generously provided for the dining room and kitchen.

The general Sunday-school secretary will require ample and well-arranged space for his literature, records and other supplies.

In the larger schools each department secretary should have a suitable cabinet for the supplies and varied paraphernalia required in his department.

Each class room should be provided with some convenience for the care of class possessions. A drawer with lock and key may be sufficient



—*Frank L. Smith, Architect.*

CONVENIENT CLASS ROOM CABINET

for small classes, though large classes will require more generous provision.

The Central Christian Church, Lexington, Ky., is furnished with class room cabinets of design shown in accompanying drawings. Each cabinet has two doors, one opening in the corridor or department assembly room, the other opening in the class room. Literature and other supplies may be left for the class at the pleasure of the secretary and without disturbing the class; records may be deposited by the class for the secretary to secure at his convenience. The drawings give sufficiently full directions, so that any carpenter may construct and install the cabinet. See preceding page.

OPEN CLOSED

The cabinet shown above is suitable for department or class use, offering space for Bibles, literature, hymn books and teaching material. Under the top is a space subdivided as shown, while below is a roomy cabinet with shelf. The top and door are equipped with lock and key. The cabinet also forms a useful table for the teachers. This cabinet is offered by the DeLong-Svoboda Co., Witherspoon Building, Philadelphia, or it may be made to order by any millwright.

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Burroughs, Prince Emanuel,
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